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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XX.

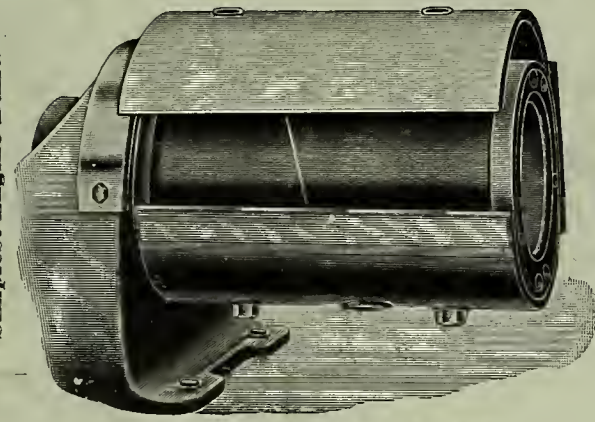
CHICAGO, ILLINOIS, OCTOBER 15, 1901.

No. 4.

{ ONE DOLLAR PER ANNUM
SINGLE COPY, TEN CENTS. }



Simplest Engine Built.



Davis Patent Detachable Water Jacket.

Write for Catalog

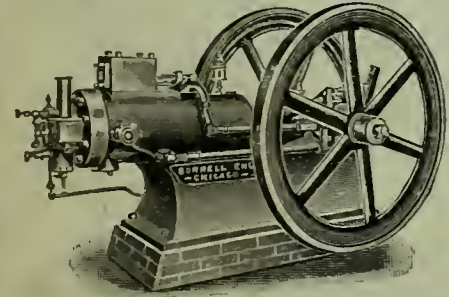
Describing a thoroughly high grade engine combining the most modern improvements.

On the market eight years. Thousands in use.

Successfully Used by Largest Elevator Lines in the Country

OMAHA, NEB. DAVIS GASOLINE ENGINE WORKS CO., WATERLOO, IOWA.

The BURRELL ENGINE
USES GAS OR GASOLINE.



THERE IS NOTHING BETTER.
Quality High. Price Low.

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241-247 So. Jefferson St., CHICAGO,

MANUFACTURE AND FURNISH

Modern Appliances

For elevating and conveying grain and like commodities.

ROPE, BELT AND CHAIN TRANSMISSION.

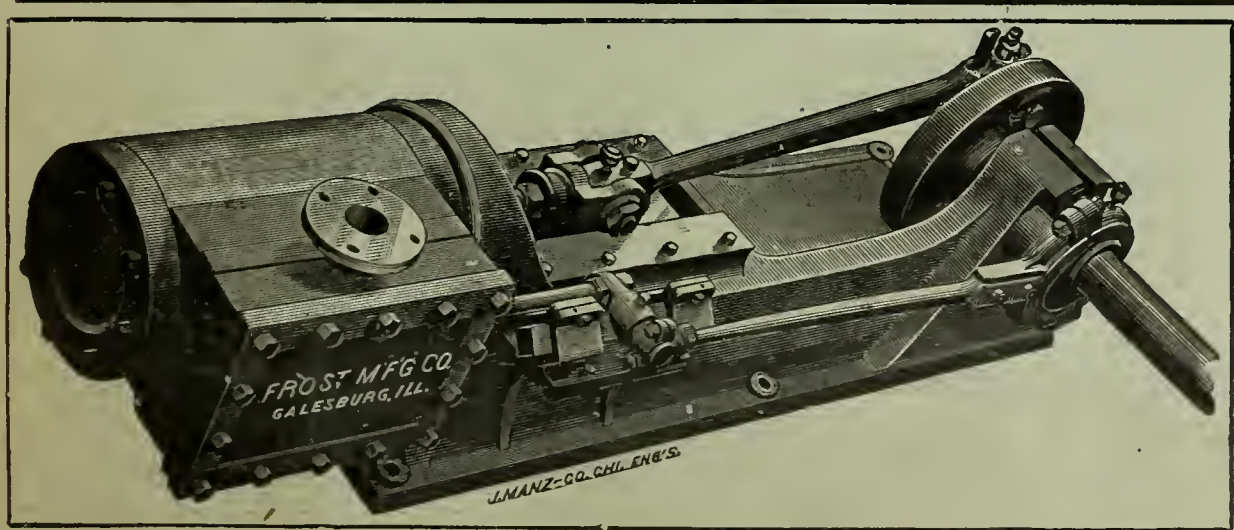
COMPLETE OUTFITS FOR LARGE OR SMALL GRAIN ELEVATORS.

"SALEM BUCKETS."
EVERYBODY KNOWS THEM.
EVERYBODY USES THEM.



Send for our catalogue.

Write us for prices.



FOR PRICES AND DISCOUNTS
—ON—
Elevator Machinery
AND SUPPLIES
—OF—
Every Description,
EITHER STEAM OR HORSE-POWER,
ADDRESS
THE FROST MFG. CO.,
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THE OLD AND THE NEW

We can suit a conservative who believes in French burr stone for

FEED GRINDING,

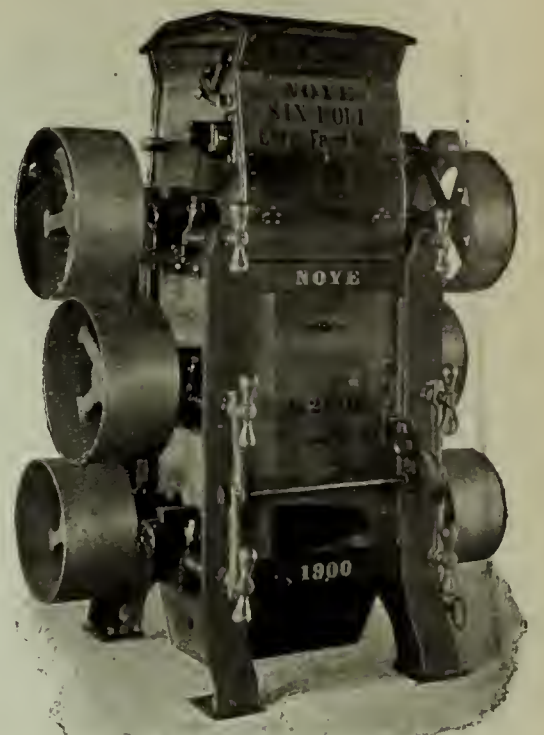
For we have the best stone mill on the market.

We also meet and exceed the expectations of the progressive with our famous

SIX-ROLL MILL.

Grinds seventy-five bushels of fine meal per hour with fifteen horsepower. It grinds oats and cobs equally well.

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ALL BELT DRIVE.

STRETCHED ELEVATOR BELTING.

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Give You
Prompt
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THE GUTTA PERCHA AND RUBBER MFG. CO.,
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NONE SO GOOD FOR THE PRICE.
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ALL SIZES FROM 1/2 TO 2" IN DIAMETER
IN LENGTHS UP TO 3000 FT. IN STOCK.

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Our Old Colony selected long fibre Manila Transmission Rope embodies every point of high quality and efficiency that long experience and scientific experiment have contributed to the art of rope making. It is the one rope on the market sold absolutely on its merits, its price being always based on the market value of the best marks of Cebu Manila hemp, of which it is made.

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The Most Economical and Rapid Feed Grinder

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The only Cob Crusher, Corn, Bran and Screenings Grinder.

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For Elevating, Conveying and
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LEVIATHAN BELTING

Gives the best results. Holds buckets firmly and securely, and resists heaviest strains. Will do 50% more work than the best rubber belt, and will outlast three of the same. Its record for nineteen years handling grain, stone, sand, ore, coal and clay substantiates our claim. Belts warranted uniform throughout. Made of any width up to 100 inches, and any length up to one mile.

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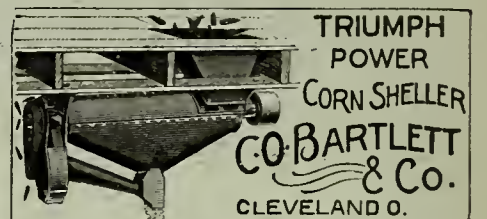
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Gibbs' Patent Dust Protector is invaluable to operatives in every industry where dust is troublesome. It has been thoroughly tested for many years in every kind of dust and is the only reliable protector known. Perfect ventilation. Nickel plated Protector \$1, postpaid. Circulars free. Agents wanted. Gibbs Respirator Co., 30-36 La Salle Street, CHICAGO.



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CORN SHELLER
CO. BARTLETT
& Co.
CLEVELAND O.**

THE GERBER IMPROVED DISTRIBUTING SPOUT (Patented May 15, 1900.)

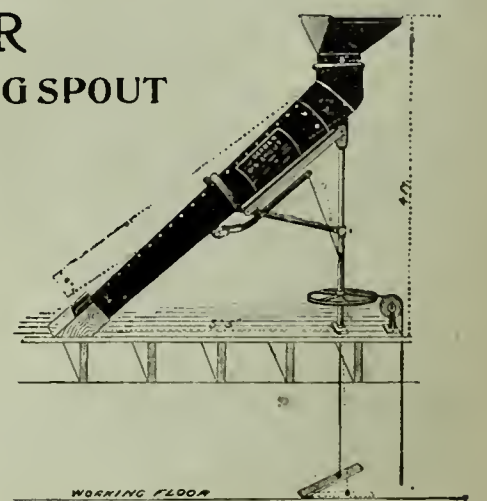
Sells freely because it prevents the mixing of grain, and is one of the most durable spouts on the market.

Elevator spouting of all descriptions.

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You to know that our firm name stands for standard goods at right prices.

Grain Elevator Machinery and Mill Supplies.

**Power Transmission,
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**Steam Engines
and Boilers.**

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EVERYTHING IN THE LINE OF MILL AND ELEVATOR MACHINERY AND SUPPLIES.

SEND IN YOUR SPECIFICATIONS AND WE WILL QUOTE YOU PRICES. GENERAL CATALOGUE FREE.



All Styles of
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Spouts.

Grain Buckets
of all Kinds.

Flexible Spouts, Any Size or Length

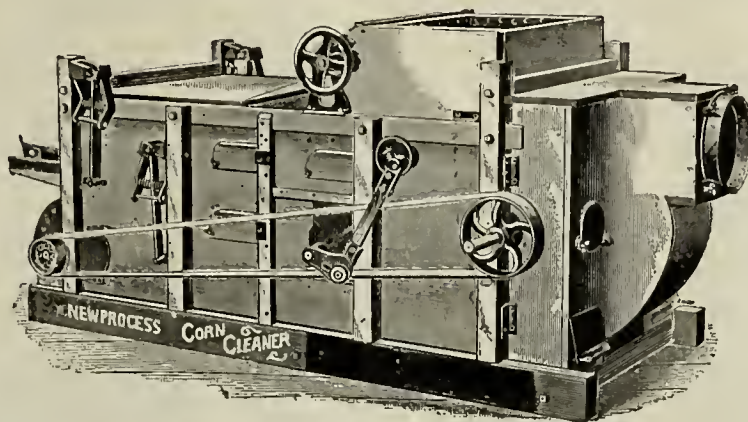


Fanning Mills and Warehouse Separators.

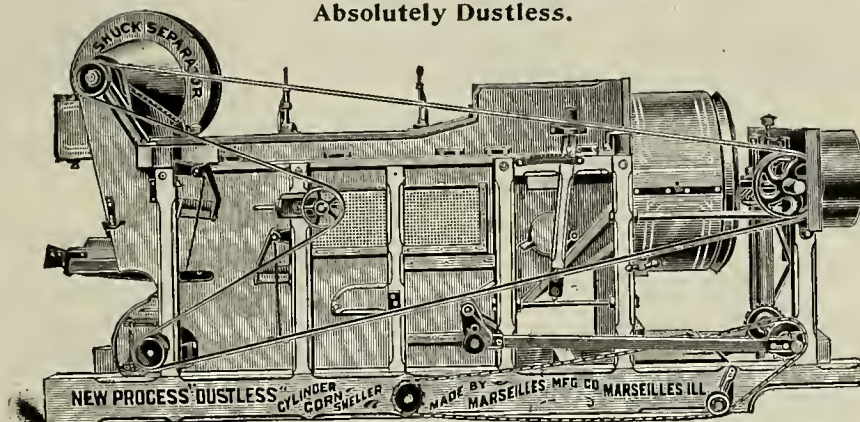
Pulleys,
Shafting,
Hangers,
Gearing,
Pillow Blocks,
Set Collars,
Sprocket Wheels,
Chain, Rubber, Cotton
and Leather Belt.

Power Transmitting Appli-
ances of Every Description.

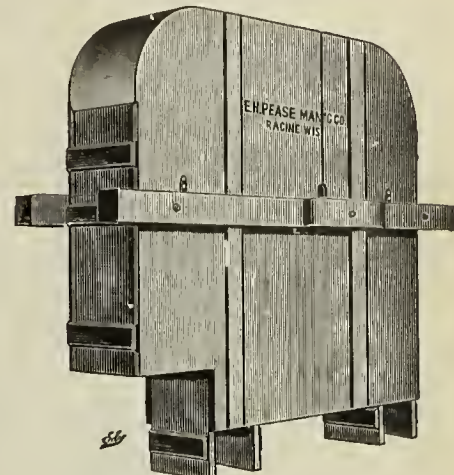
SHEET-STEEL WORK A SPECIALTY.



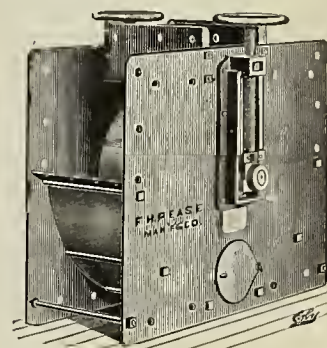
Easily Adjustable, Lightest Running,
Absolutely Dustless.



New Process Corn Shellers and Cleaners, furnished either as
Combined or Separate Machines, also with or without
Husk Separating Attachment.



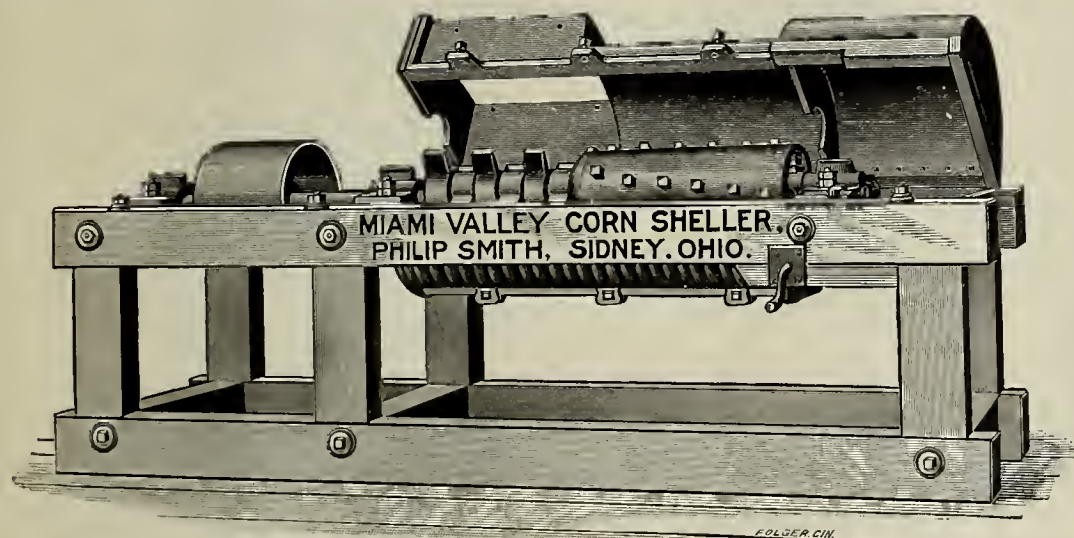
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Mechanically Perfect.



Elevator Boots, All Styles,
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Simplest in construction; shells perfectly; gets all the corn. Can shell new corn earlier than any other sheller. The cylinder is made of hard chilled iron, cast solid on the shaft, fully balanced. This sheller is guaranteed to give entire satisfaction, and is guaranteed to do as good work as any other sheller made.

We also manufacture a complete line of Elevator Machinery, such as corn cleaners, chain drags, feeders, elevator heads and boots, conveyors, dumps and mill and elevator supplies of all kinds.

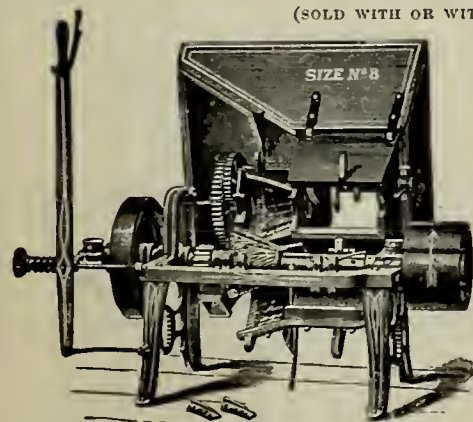
Send for cut and description of our
latest improved Chain Drag Feeder.

We handle everything pertaining to your interest. Parties contemplating building or making any improvements should write us for prices and description of our machinery.

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The Best All-Around Feed Mill

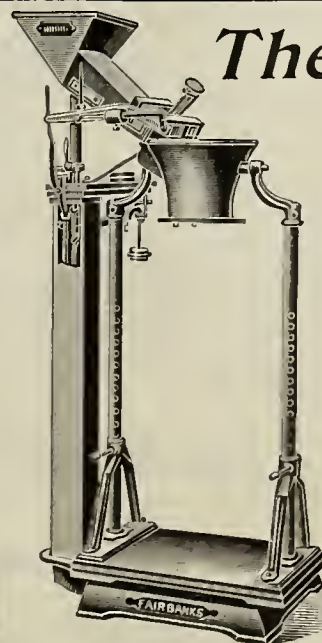
(SOLD WITH OR WITHOUT SACKING ATTACHMENT.)



For *crushing ear corn*, with or without shuck, and *grinding* all kinds of *small grain*. The conical burrs are *light running* and ahead of rolls or stones in speed and quality of work. Has every convenience belonging to a first-class modern feed mill. *Will grind Kaffir corn* in the head. Sold with or without bagging attachment. Made in seven sizes, ranging from 2 to 25 h. p.

You will need one early this Fall. Lay your plans now for a profitable season. Our Catalogue sent for the asking.

The N. P. Bowsher Co., South Bend, Ind.



The Bosworth...

Automatic Weighing Scale

FOR WEIGHING AND BAGGING
ALL KINDS OF GRAIN.

Rapid work. Saves time.
Accurate weight. Best investment that can be made.

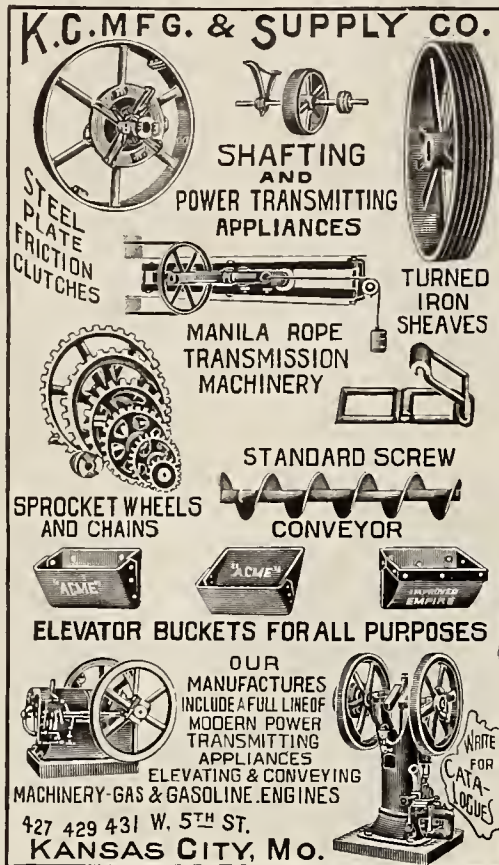
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Munson Bros. Co.,
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K. C. MFG. & SUPPLY CO.,

Complete Grain Elevator Equipments Carried in Stock.

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SOUTHWESTERN
AGENTS
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EXCLUSIVE
AGENTS FOR
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Steam Engines
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Also Union
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Boiler Feeders,

Gasoline Engines,
Spiral Conveyor,
Pulleys,
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Collars,
Sprocket Wheels,
Sprocket Chain,
Elevator Boots,
Elevator Buckets,

Flexible Spouts,
Turn Heads,
Wagon, Hopper and
Dump Scales,
Rubber and Cotton Belting.

WRITE FOR PRICES AND CATALOGUE.

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ENGINEERS, FOUNDERS, MACHINISTS,

Main Office and Works, **Mishawaka, Ind., U. S. A.**

Branches: CHICAGO, BOSTON, NEW YORK, CINCINNATI, ATLANTA, GA., LONDON, ENG.

MANUFACTURE A COMPLETE LINE OF

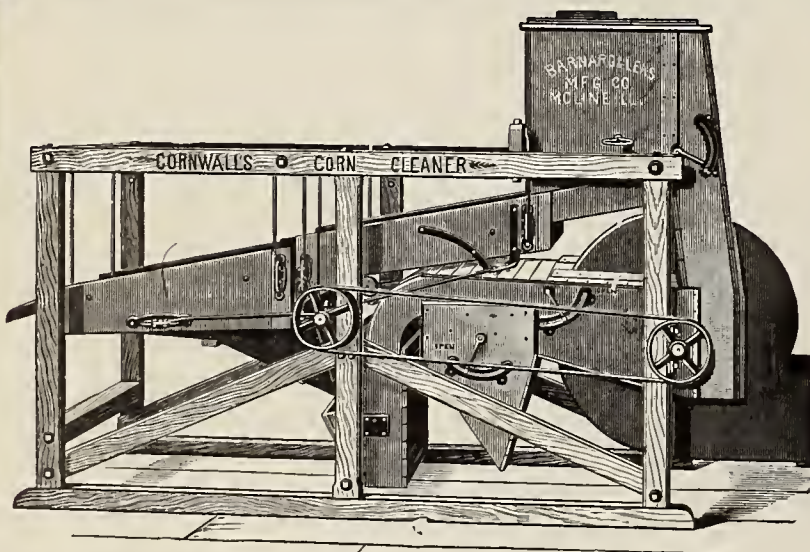
**GRAIN ELEVATOR
MACHINERY**

Embracing latest types of Grain Trippers, Power Shovels, Car Pullers, Belt Conveyors, Marine Legs Spouting, Etc.; Self-oiling and Dustproof Bearings, also Dodge American System Manila Rope Transmission.

The following Grain Elevators, under construction or in operation, are among those recently equipped:

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Northern Grain Co., Council Bluffs, Ia.,	- " 750,000 "
Botsford & Jenks, Meaford, Ont.,	- " 1,000,000 "
Chicago Dock Co., Chicago, Ill.,	- " 1,000,000 "
D. H. Stuhr Grain Co., Hammond, Ind.,	- " 600,000 "
Electric Steel Elevator, Buffalo, -	- " 1,200,000 "
McReynolds & Co., Hammond, Ind.,	- " 2,000,000 "
Calumet Elevator Co., South Chicago, Ill.,	- " 1,200,000 "
Rosenbaum Bros., South Chicago, Ill.,	- " 1,000,000 "
Peavey Grain Co., South Chicago, Ill.,	- " 1,500,000 "
Chicago-O'Neil Grain Co., South Chicago, Ill.,	- " 750,000 " etc., etc.

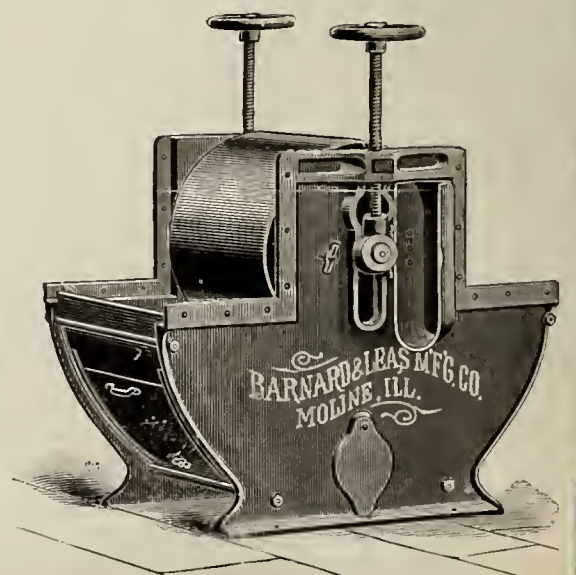
Have the Largest Factory in the World Exclusively Devoted to the Manufacture of Power Transmitting Machinery. CATALOGUE UPON APPLICATION.

**Elevator
Machinery
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Supplies**

Guaranteed to clean corn cleaner than any rolling screen cleaner made. Dustless, light running and durable. Once through does the work. Use it and your corn will never grade dirty.

We also make the VICTOR CORN SHELLER, which is in use everywhere. BARNARD'S PERFECTED SEPARATORS, a complete line of SCOURERS, OAT CLIPPERS, Etc. We make or supply

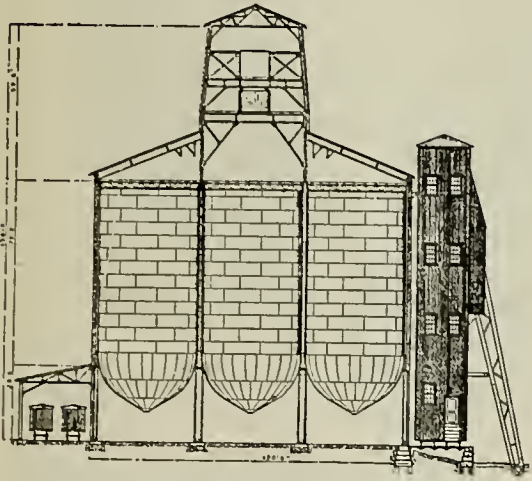
Elevator Heads, Elevator Boots (either wood or cast iron),
Distributing Spouts, Turn Heads,
Indicators, Flexible Spouts for
loading cars, Elevator Buckets,
Belting - Chain, Leather, Cotton, Rubber,
Everything Needed in the Elevator Line.

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MANUFACTURERS, ENGINEERS, CONTRACTORS.

Grain Elevators of Steel,
ALSO
Gas Holders with Steel Tanks.



Cross section of Great Northern Elevator furnished by us at Buffalo, N. Y. Three million bushels' capacity. Steel throughout.

Water and Oil Tanks,
Steel Buildings,
Steel Stacks and
Steel Construction of
Every Description,

Designed,
Furnished and
Erected in
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WE HAVE A COMPLETE MODERN EQUIPMENT FOR
MOLDING AND FINISHING

IRON PULLEYS

AND

ROPE SHEAVES

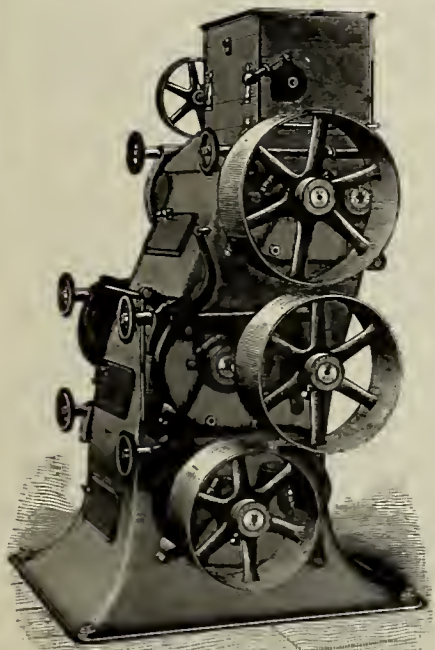
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STEPHENS, ADAMSON & CO.,

MANUFACTURERS OF

GRAIN ELEVATOR MACHINERY,

AURORA, ILL.



3-PAIR-HIGH, SIX-ROLLER MILL.

CUSTOM WORK!

UTILIZE YOUR POWER
BY OPERATING A GOOD MILL FOR GRINDING

...FEED AND MEAL...
IT PAYS

WE MANUFACTURE
THREE-ROLL, TWO-BREAK MILLS, 2 Sizes.
THREE-PAIR HIGH, SIX-ROLLER MILLS, 4 Sizes.
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...And...

PORTABLE FRENCH BUHR MILLS,
85 Sizes and Styles.

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VERTICAL
UNDER RUNNERS,
UPPER RUNNERS,
PULLEY AND GEAR DRIVES.

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ROPE DRIVES, GEARING, CORN SHELLERS and CLEANERS, GRAIN CLEANERS.

DUST COLLECTORS (Tubular, Automatic).

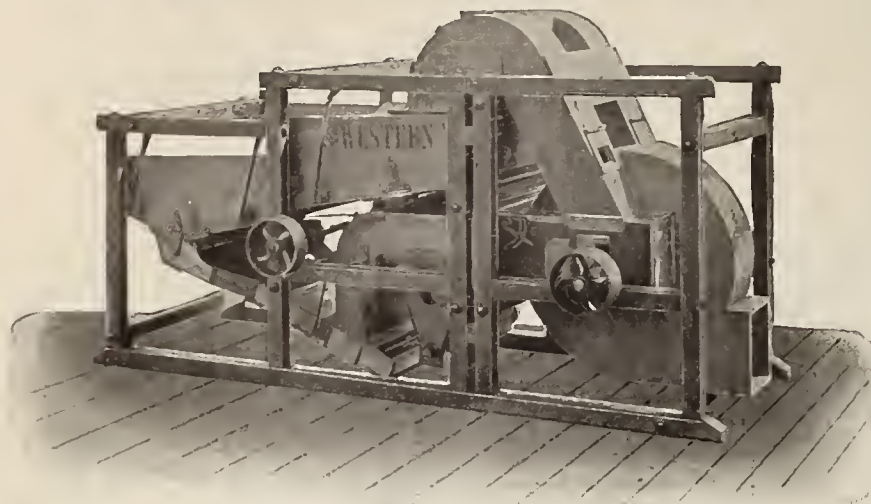
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We manufacture Elevator Cups for all purposes, and make a greater number of sizes than found in any standard list. Our Cups have greater capacity than others of same rated size; for instance, our 3½x3 inch, list price 9c., has as much capacity as others 3½x3½ inch, list price 10c. Our prices are right

CORRESPONDENCE SOLICITED.

NORDYKE & MARMON CO., INDIANAPOLIS, INDIANA, U. S. A.

FLOURING MILL ENGINEERS, IRON FOUNDERS AND MACHINISTS. ESTABLISHED 1851.



Side View.

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SOLE MANUFACTURERS.

Write for Catalog.

The "Western" Shaker Cleaner

Separates CORN from COBS and Cleans WHEAT and OATS THOROUGHLY without changing screens.

Adjustable Screen.

Perfect

Separations.

Perfect Cleaning.

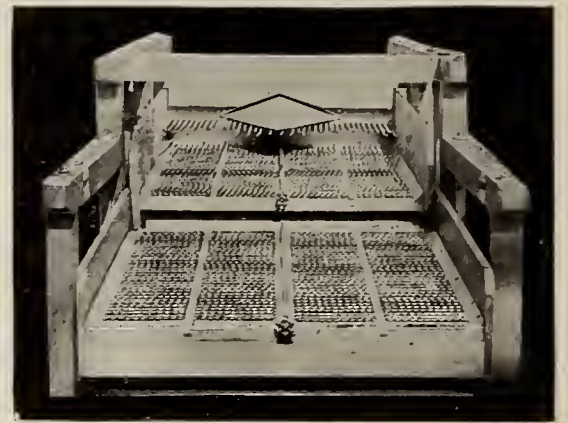
Duplex Shake.

Strong, Light,

Durable,

Compact and

Quiet.



End View.

JEFFREY ELEVATORS. CONVEYORS.

Designed to Suit Requirements.



Jeffrey Standard Steel Elevator Buckets

For handling
GRAIN, SEED, FLOUR,
And for light and medium
work in general.

FOR CATALOGUE ADDRESS

The Jeffrey Mfg. Co.,
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INSURANCE

ON GRAIN ELEVATORS
AND CONTENTS

Is furnished at cost by the
MILLERS' NATIONAL INSURANCE CO.,
of Chicago.

It is a Mutual Company which insures more mills and grain elevators than any other company in the United States.

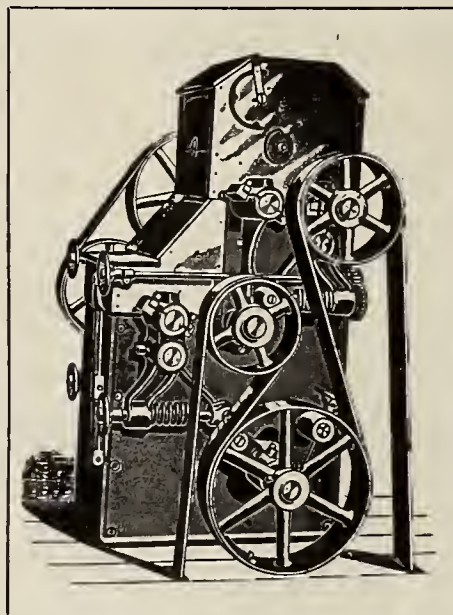
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Its cash assets, January 1, 1901, amounted to \$761,155.90; total admitted assets, \$2,828,533.69; net cash surplus, \$472,753.43; surplus over all liabilities, \$2,540,131.22.

The same conservative management which has directed the Company's affairs all through its prosperous existence will be continued.

Before placing your insurance, write to the Company at No. 205 La Salle Street, Chicago, for a copy of the circular and statement, which fully explains the Company's method of insuring your class of property on the mutual plan. If your risk is up to the required standard you cannot afford to insure in any other company.

W. L. BARNUM, SECY.



A Good Feed Mill

Is a paying investment.

Put one in your elevator and it will more than pay all your running expenses. It will be an accommodation to the farmers

**AND WILL INCREASE
YOUR TRADE.**

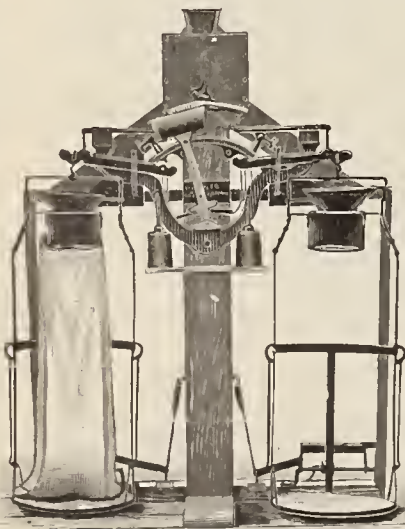
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BEST FEED MILL ON EARTH.

Northwestern Agents for the Hyatt Roller Bearing.
Write us; we can interest you.

Strong & Northway Mfg. Co.,
MINNEAPOLIS, MINN.

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Cutler Bagging Scale



For weighing Grain, Meal,
etc., Automatically, in even
weight packages.

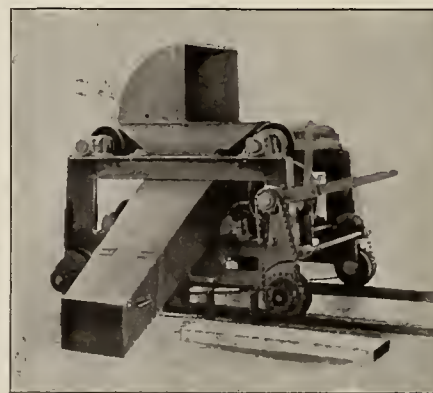
**Two
Scales in
One Frame**

Operated by one man. Accurate, economical

Not an experiment. In successful use 10 years.

THE CUTLER CO., North Wilbraham, Mass.

THE LINK-BELT MACHINERY CO., ENGINEERS, FOUNDERS, MACHINISTS, CHICAGO, U. S. A.



Grain Elevator Machinery

INCLUDING

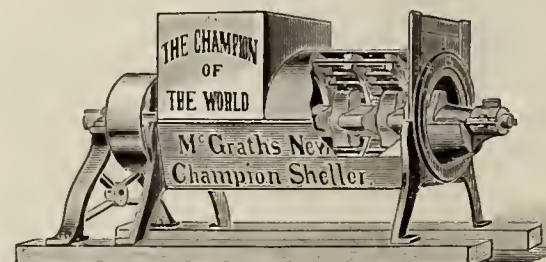
BELT TRIPPERS,
POWER SHOVELS,
SPOUTS, BUCKETS, BOOTS,
MACHINE MOLDED ROPE
SHEAVES,
SHAFTING, PULLEYS,
SHAFT BEARINGS, GEARING,
FRICTION CLUTCHES, ETC.

LINK-BELT ENGINEERING CO., PHILADELPHIA AND NEW YORK.

R. H. McGRATH, LA FAYETTE, IND.

MANUFACTURER OF

Steam Engines
and Boilers,
Mill Gearings
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of all kinds,
Foundry and
Machine Work.



McGrath's
Champion Iron
Corn Shellers
for
Warehouses,
McGrath's
Grain Dumps.

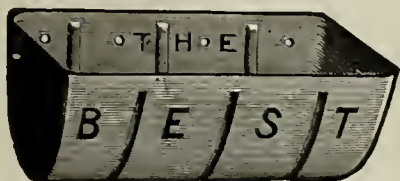
Conveying, Elevating and Power-Transmitting Machinery

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GENERAL MACHINISTS,

Western Avenue, 17th to 18th Streets, Chicago, Ill.

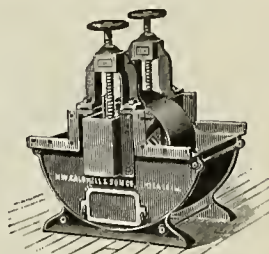
—CALDWELL HELICOID CONVEYOR.—

Specialties for
Grain Elevators and Mills.THE ONLY PERFECT SPIRAL
CONVEYOR; with Flight of One
Continuous Strip of Metal.CALDWELL CORRUGATED SEAMLESS
STEEL ELEVATOR BUCKETS.

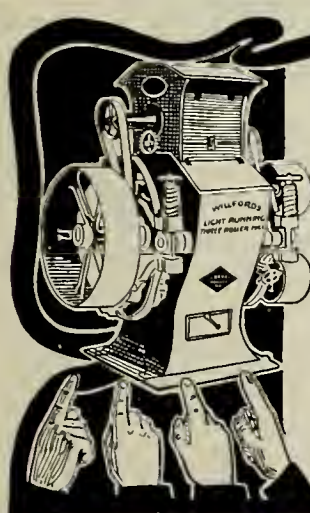
LINK BELTING.
SPROCKET WHEELS.
COTTON BELTING.
RUBBER BELTING.
LEATHER BELTING.
BELT CLAMPS.
POWER GRAIN SHOVELS.
ELEVATOR BOLTS.
ELEVATOR BUCKETS.
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COUPLINGS.
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PILLOW BLOCKS.
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Elevator
Boot.

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ON THE

Willford Three-Roller Feed Mill.

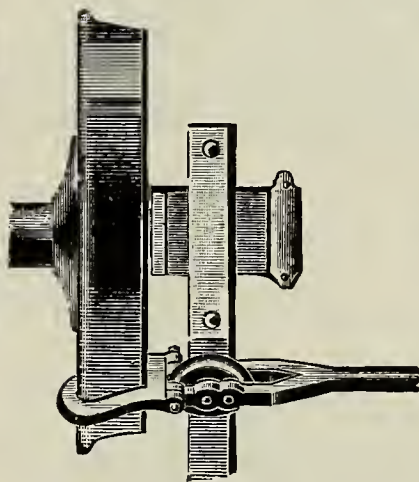
- (1) It is Easy to Handle.
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- (4) It can Always be Relied Upon.

Write for Circulars and Prices.

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SPECIAL CAR MOVER.

(PAT. APRIL 2, 1901.)



SHIPPED ON TRIAL.

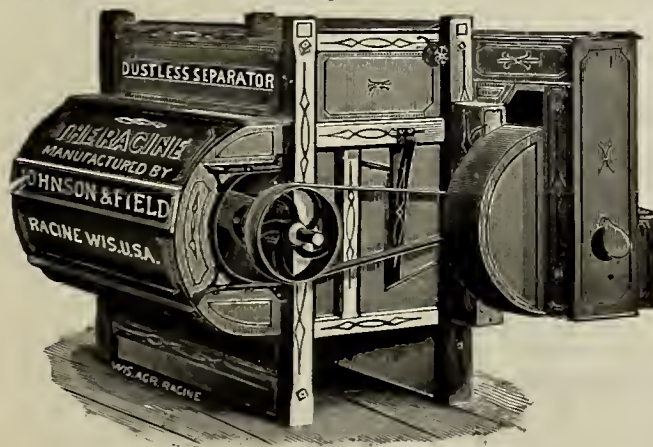
Moves train of cars on good level track.

Hook grips face of wheel and 3,000 to 4,000 pounds is applied in the direct course of the revolution of the wheel.

It moves a car with less power and greater speed than any mover on the market. Price \$5.00, F. O. B. Sac City, and shipped C. O. D., subject to trial and acceptance.

"THE RACINE" DUSTLESS GRAIN SEPARATOR

Embodies more points of Excellence than any other machine offered for similar purposes, and is Light Running, Large In Capacity, Perfect In Separation and with Great Strength and Durability.

Made in Different Sizes to
Meet Different Requirements.

THE RACINE Heavy Warehouse Mill

Is especially adapted for horse-power use, is supplied with Patent Governor Pulleys, has an even and steady speed, is built extra heavy and holds throughout. This machine has large capacity and is more durable than any other Warehouse Mill made.

Elevator Machinery
and Supplies.

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THE CONVEYOR CAR LOADERS have advantages over other loaders.
LET US SHIP YOU ONE ON TRIAL.

THE INCLINE ELEVATOR AND DUMP AND STORAGE SYSTEM is the best and cheapest ear corn and small grain storage. Grain Dealers', Farmers' and Feeders' plants solve the problem of cribbing ear corn, etc., without shoveling.

Grain dealers' elevator having 100,000 bushels' capacity can be built for \$3,500.00.

WRITE FOR FULL PARTICULARS.

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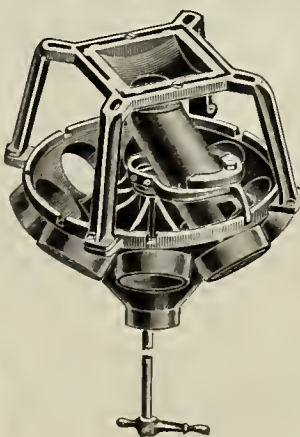
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As well as danger to employes
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Cyclone Dust Collectors

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THE KNICKERBOCKER CO.,
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Mixing Grain

by skilled manipulators, in the right way, is profitable business, but **mixing grain** at the point of distribution at the elevator head by using a bungling turn spout is not only decidedly unprofitable but the most wasteful feature in the grain business.

Our distributor with its patent overflow system is the best thing in the world for distributing grain. Never mixes a kernel; saves labor; not only lasts longer than any other device known, but does perfect work while it is lasting.

Our illustrated booklet tells a great deal about mixing grain at point of distribution. Shall we send you one?

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Two-shoe Counterbalance Separator Are Fully



Borne Out by One of the Largest Mills in Minnesota.

NEW PRAGUE FLOURING MILL COMPANY,
New Prague, Minn., U. S. A.

MILLS AT NEW PRAGUE AND BLUE EARTH.
Daily Capacity 2,400 Barrels.

THE S. HOWES CO., Silver Creek, N. Y.

August 12, 1901.

GENTLEMEN:—The "EUREKA" No. 167 Two-fan, Double-shoe Elevator Separator recently sold us has been thoroughly tested, and we are pleased to say it is the **finest working machine we have ever used**. The automatic feed works perfectly, equally distributing the grain in the suction leg, giving the air a chance to perform its work in a proper manner. The construction of the shoes are such that **the best possible screening is given** the grain, and the **separation of oats and other material is very satisfactory** to us, and we do not think it can be bettered. The air separations are strong and fully under control, and are all that may be desired. The **double shoe, driven by opposite eccentrics, forms a perfect counterbalance**, permitting the machine **to run without vibration of frame**, consequently no bracing of machine is necessary. In fact, the construction, finish and operation of this machine is such that we have no hesitancy in recommending it to others wanting a first-class separator. Very truly yours,

NEW PRAGUE FLOURING MILL COMPANY,
By J. S. K.

We will ship you a machine and guarantee it to do as good work.

Write for our new catalogue, full of improved machines.

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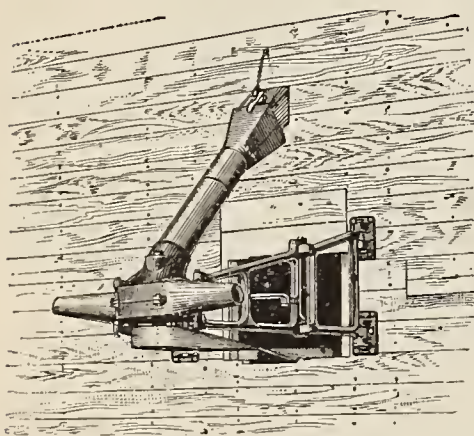
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Loads both ends of a car at the same time.

Loads any size car from end to end and full to roof, without the aid of hand labor.

Nothing to get out of order and cause trouble.

Guaranteed to load shelled corn, wheat, oats or rye from 2,500 to 3,000 bushels per hour, with but very little power required to operate.

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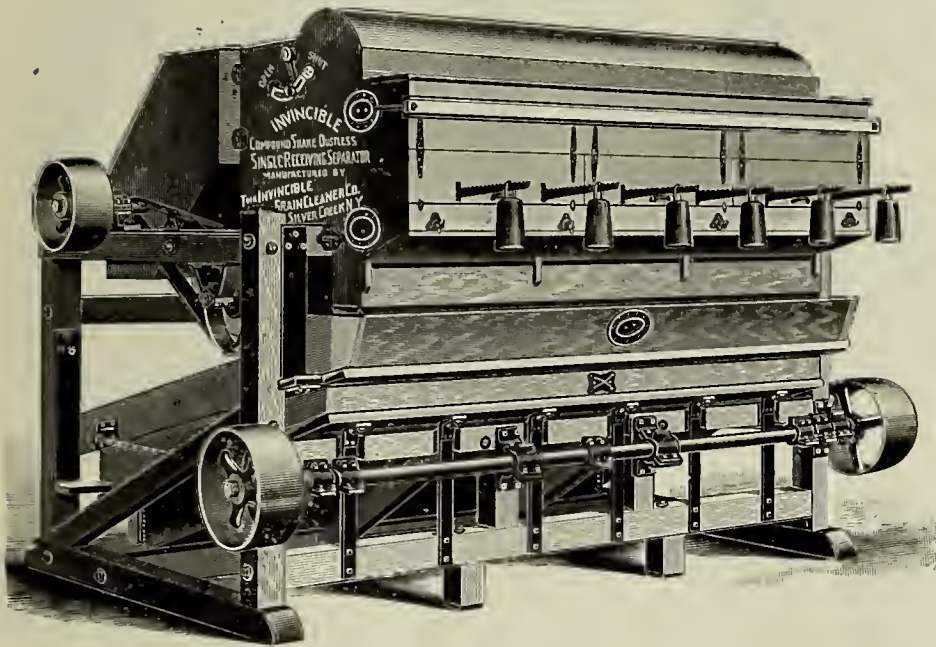
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The Invincible Compound-Shake Separators

Can be placed anywhere in the elevator.
They never shake the building but stand as steady as a rock.
Their work is perfect.
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Needle Screen Gravity Separator and Spiral Belt Separator.

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Are more largely used on this continent than all others combined, because they are the only machines that will handle with equal facility grain containing 50 per cent moisture to that simply damp and musty. These machines will operate successfully and rapidly at a temperature as low as 110 degrees. Practical millers and elevator men will appreciate this. It is one thing to kiln dry and another to put every kernel of grain into its normal condition by Nature's own method. *We can do it.*

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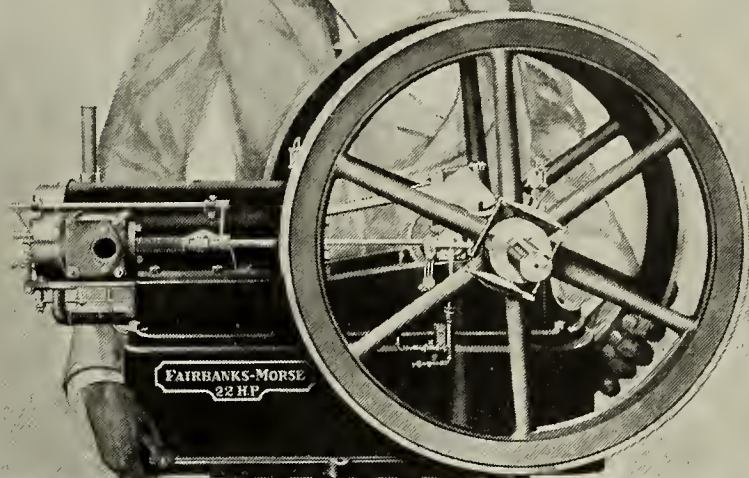
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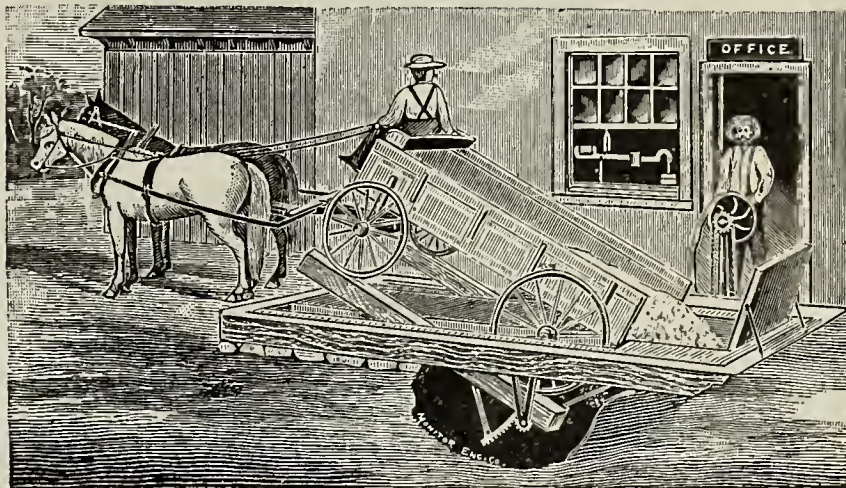
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ON EARTH**

Gold Dollars



At FIFTY CENTS apiece are CHEAP, but they do not represent a better investment than we offer the "elevator and grain trade" in our

Controllable Wagon Dump.

WINCHESTER, ILL., February 4, 1896.

MESSRS. SAVAGE & LOVE CO., Rockford, Ill.

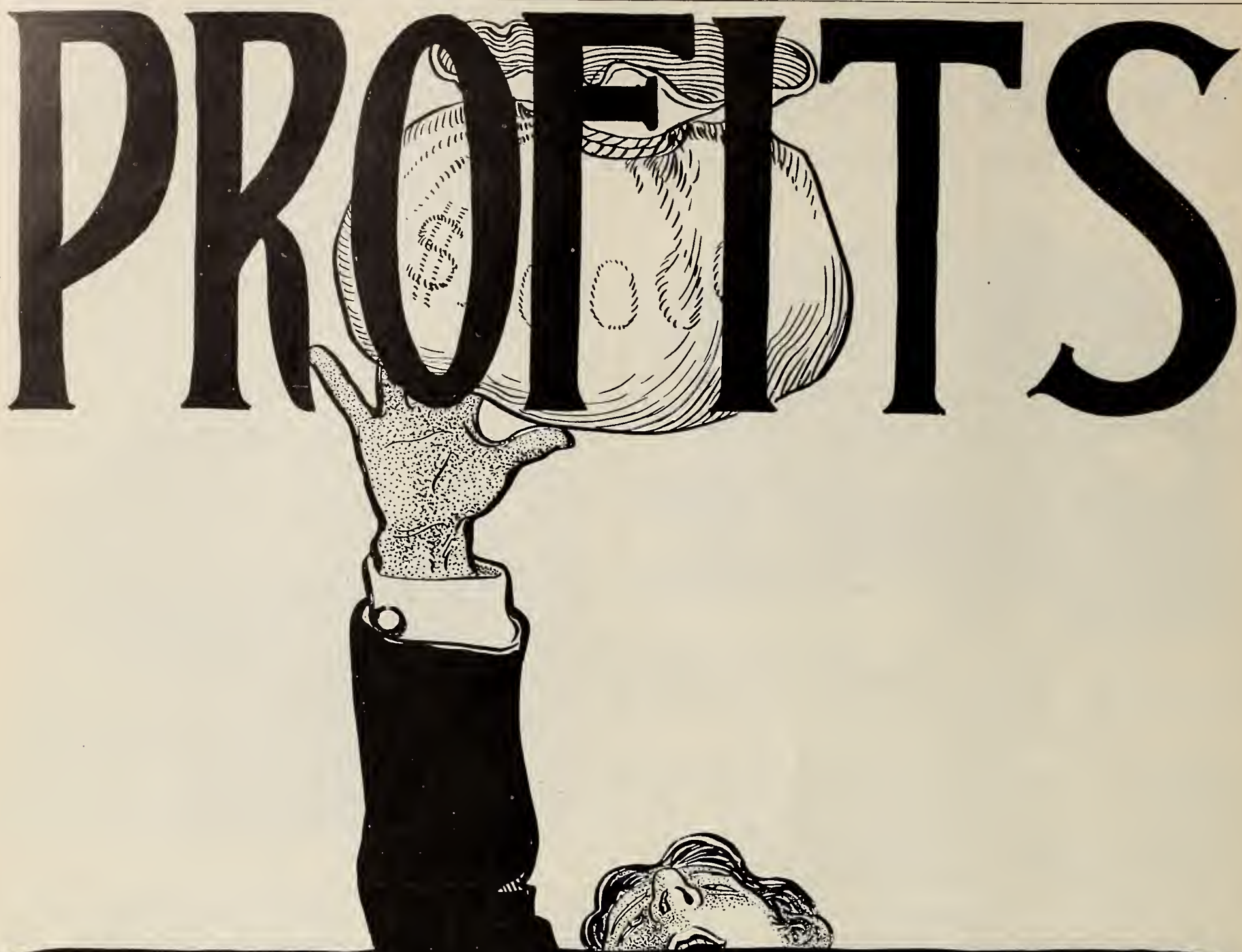
GENTLEMEN:—Your favor of the 28th ult. received and noted. Last July I put one of your Controllable Wagon Dumps in a Fairbanks, Morse & Co.'s 22-ft. scale, and it has given me entire satisfaction in every respect. In this locality the bulk of grain is as yet handled in sacks, and by tipping the Dump about one-half it makes a nice slant, making it very easy to pull the sacks to back end of wagon, where strings are cut and grain runs out into bin below. Every farmer, without exception, speaks in glowing terms of the merits of this Dump. In unloading loose grain from wagon there is no dump that will equal yours in being easily handled and always under control of operator. No scaring horses, no dropping of wagon and no noise. I consider a grain elevator incomplete without the Savage & Love Controllable Wagon Dumps.

Yours truly,
M. C. WOODWORTH.

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THE SAVAGE & LOVE CO., Rockford, Ill.

FAIRBANKS, MORSE & CO., St. Paul, Minn., Northwestern Agents.



Boil it down—this talk about equipment—and you will find that it is all a question of results—which is another way of spelling “Profits.”

The grain man, whether he be elevator man, dealer or handler, wants to make money. He is willing to invest money in anything that will make it.

When we came into the field to make grain-cleaning machinery for the grain men, we said: “It is the better business to make a \$500 machine that will produce 10 per cent profit than a \$250 machine that will make but 4 per cent.”

Now, we leave it to any grain man if our principle is not correct.

A good machine not only earns more money on the money necessary to buy it—but it makes a larger percentage on that money.

The larger per cent is the real test of the powers of a machine, as a profits producer.

Our Elevator Machines—the Monitor Dustless Warehouse and Elevator Separators—will do exactly what our tables say. Capacity in a Monitor machine means capacity in **your** place this year and next—not under exceptionally favorable circumstances.

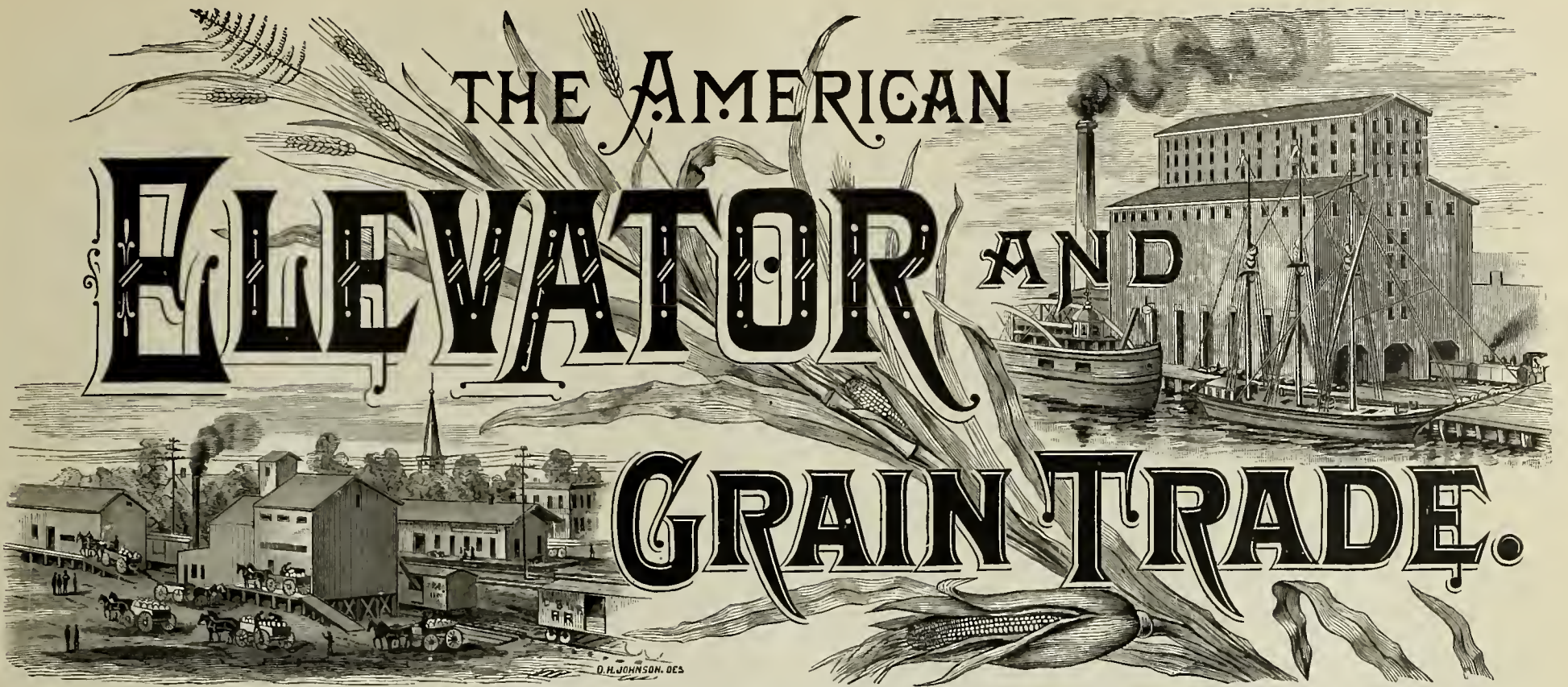
Not only in our Separators but in our whole Monitor line, the same rule applies—always profit producers, because they do exactly what is expected of them in exactly the way it should be done.

Ever see our little book? It is free for a postal.

The Huntley Manufacturing Co.,

The Monitor Works, Silver Creek, N. Y.





A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

Vol. XX.

CHICAGO, ILLINOIS, OCTOBER 15, 1901.

No. 4. } ONE DOLLAR PER ANNUM.
SINGLE COPY, TEN CENTS.

THE MEAFORD ELEVATOR.

The harbor of Meaford, Ontario, is the terminus of the Collingwood branch of the Grand Trunk Railway on Georgian Bay. It lies 480 miles by steamer route east of Chicago and 430 miles west of Montreal. The harbor, which has been selected for improvement by the Canadian govern-

ment, is formed at the mouth of a small stream known as Big Head River. At present there is, as a recent report to the Marine Review tells us, a breakwater on the east side projecting into the lake about north by west 750 feet. On the west side is a pier about 500 feet long, with east breakwater and west pier to form a protection from the lake. There is a harbor enclosure about 1,450 feet long and varying in width from 140 feet to 700 feet at its widest part. There is an arm extending from the west pier to the breakwater within a distance

of about 150 feet, forming the entrance. At the present time a channel 150 feet wide and 22 feet deep is dredged from the harbor entrance up to the elevator, making the channel ample for entrance of the largest of lake steamers. The improvements yet to be made and which are going ahead rapidly are to extend the east breakwater out into the lake 600 feet, curving it more to the west so as to protect

Meaford Elevator Company, also of Port Huron. The elevator has a working house of 150,000 bushels and the storage annex of 600,000 bushels. The foundation is of concrete and the dock is a solid concrete pier twenty-eight feet deep. The floors also of the elevator are all concrete, while the superstructure is of laminate work. The bins were built of 2x8, 2x10 and 2x6 hemlock timbers,



THE MEAFORD ELEVATOR COMPANY'S NEW ELEVATOR AT MEAFORD, ONT., ON GEORGIAN BAY.

ment, is formed at the mouth of a small stream known as Big Head River. At present there is, as a recent report to the Marine Review tells us, a breakwater on the east side projecting into the lake about north by west 750 feet. On the west side is a pier about 500 feet long, with east breakwater and west pier to form a protection from the lake. There is a harbor enclosure about 1,450 feet long and varying in width from 140 feet to 700 feet at its widest part. There is an arm extending from the west pier to the breakwater within a distance

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the harbor entrance and to take off 150 feet of the arm at the west pier, so as to give a wide entrance of about 250 feet to the harbor. The whole area enclosed is to be dredged to a depth of twenty-two feet. The bottom is hard clay, and will carry seven fathoms of water within 1,000 feet of the harbor entrance.

The elevator improvement of the harbor is the new house shown in the accompanying engraving, designed and built by the Botsford-Jenks Company of Port Huron, Mich., and operated by the

balance of the timber being Norway pine. The elevator is entirely covered with corrugated elevator siding, painted black.

The machinery was made by the Dodge Manufacturing Company of Mishawaka, Ind., and includes the following: The marine leg is of steel, with capacity of 15,000 bushels per hour. The inside lifters have cups 32x7x8 inches, the belts traveling 700 feet per minute. There are four conveyors made of 40-inch rubber belting, traveling 1,000 feet per minute, furnished by the Gutta

Percha Rubber Manufacturing Company, Chicago, Ill., and there is a full equipment of steamship shovels, made in Buffalo and operated by the new Westbrook Compressed Air system.

The engine is a McKeown High-Speed Automatic, able to indicate 500 horsepower, and there are two horizontal boilers. The power plant was furnished and installed by the Watrus Engine Company of Brantford, Ontario. The elevator drives by rope transmission throughout.

With four 1,200-bushel hopper scales of new pattern, adjustable, made by the Howe Scale Company, and four bifurcated loading spouts for loading cars, with track room for loading 200 cars per day of ten hours, it is expected by the builders that this elevator will prove itself to be the fastest single-leg marine elevator on the lakes. It will be strictly a public elevator, operated as a transfer and storage house for the benefit of the customers of the Grand Trunk Railway system, of which F. A. Howe of Chicago is general agent.

The first grain put into the new house was taken from the SS. Spokane of the Wilson Line of Cleveland. The vessel arrived on August 26, carrying 150,000 bushels, and drawing 17½ feet of water had no difficulty in going right up to the elevator without the use of a tug. The harbor has no obstructions, reefs or islands in the way of steamers, and the course is direct from the entrance of Georgian Bay. In addition to the work mentioned above the Canadian government has contracted for the building of 400 feet of dock on each side of the elevator, which will make a fine wharf 900 feet long for the accommodation of grain vessels, a regular line of which will run between Meaford and Chicago, Duluth and Fort William.

MONTREAL STILL WAITING.

Montreal's elevator project is apparently as hopelessly involved as ever, at least for the coming year. Though the plans of Architect Jamieson were accepted by the Board of Harbor Commissioners on September 4 no move has yet been made to put in the concrete foundations for the structure, the delay being due to the fact that the Minister of Public Works, Mr. Tarte, has not approved of the particular style of construction specified by the successful bidder. The contract was awarded subject to his approval, which he refuses to give. He proposed to put a committee of experts at work to examine Mr. Jamieson's plans and specifications before passing final judgment, but the usual delay attending such examinations, and the extraordinary activity of the minister himself in entertaining royalty, have postponed this matter apparently beyond all prospect of a decision in time for active work this year. Mr. Tarte at length appointed Mr. Jencks, an expert engineer of St. Louis, and Mr. Vantlet, assistant engineer of the Canadian Pacific Railroad, to examine the plans of the Jamieson elevator and on their report has disapproved them.

There seems to have been a general misunderstanding of the entire matter. The commissioners on the one hand thought that Mr. Jamieson had bid on an all-steel elevator, and did not take the trouble to go over his specifications personally; whereas, what Mr. Jamieson really proposed to do was to erect a structure of composite construction from plans original with himself. Such a bid was quite within bounds under the general specifications, since these required only that all parts of the building be made of fireproof material. Mr. Jamieson's tender was \$178,000 under the next lowest bid—a fact which caused no little surprise at the time, but which is now explained by the difference in plans and specifications, Mr. Jamieson proposing to erect a less expensive structure, using a lighter weight of steel and less of it. If the foundation work is delayed until the spring of 1902 it will hardly be possible to complete the elevator before the first of November of next year.

The harbor commissioners still hold William Connors' deposit of \$50,000, which he put up as a forfeit in case of failure to build his proposed elevator. The commissioners have passed a resolution instructing their attorneys to take such steps as may be necessary to secure a rescission of the

lease and a forfeiture of such part of the \$50,000 deposit as may be adjudged as damages.

DANIEL P. BYRNE.

One of the veterans of the St. Louis grain trade whose name is a veritable household word to every habitual shipper to that market is Daniel P. Byrne, whose portrait we are privileged to print herewith. It will be thirty-one years on the 17th of this month of October since, as a mere lad, he entered the employ as errand boy of Cleary & Taylor, commission merchants handling grain, hay and seeds at St. Louis. He made his progress by regular and orderly promotions for merit and ability, until, in 1875, he was made cashier and bookkeeper, and in 1877, when the old firm was succeeded by Redmond Cleary & Co., he became manager, which is not so bad for only seven years' work.

Ten years later, 1887, the firm was incorporated as the Redmond Cleary Commission Company, at which time Mr. Byrne became vice-president and general manager, a dual position which he held until February 16, 1898, when, owing to the death of Redmond Cleary, on January 28 of the same year, the company bearing his name retired from business.

These twenty-eight years of the broadest of activity had enabled Mr. Byrne to establish himself



DANIEL P. BYRNE.

so firmly in the confidence of the patrons of the St. Louis market that when Mr. Byrne, on the retirement of the old company, organized the firm of Daniel P. Byrne & Co., his old friends predicted for the business an immediate and permanent success. This prophecy has been amply fulfilled, the firm being to-day recognized as one of the leaders in the St. Louis market.

ELEVATORS ON WHEELS.

Two cars of wheat were on track at Duluth on Saturday morning, October 5, that broke the record for big loads, one over the Northern Pacific with 1,709 bushels and the other over the Great Northern with 1,753 bushels. With a train load of these big cars, the question of big train loads is an interesting one, says the Commercial Record.

With their grades into Duluth, there is nothing to prevent either road carrying a train of fifty of these cars. At the present time the Great Northern is carrying mixed trains of 40 to 60 cars, all loaded. Fifty of these big cars, with an average of 1,700 bushels each, would make a train load of 2,550 tons.

To the railroad man the earnings of this train load would be interesting.

The wheat rate from Grand Forks to Duluth, 300 miles, is 14½¢ per hundred, making the earnings of a train load as above \$7,267.50.

Elevator A on the C., M. & St. P. road, at Milwaukee, has been made regular by the Milwaukee Chamber of Commerce for the year ending August 1, 1902.

[For the "American Elevator and Grain Trade."]

AUTUMN TROUBLES WITH GASOLINE ENGINES.

BY ALBERT STRITMATTER.

From now on until well into the winter elevator operators who are using gasoline engines will be having more or less difficulty until they have mastered a few simple facts in connection with the theory and the practical operation of their engines. One of the very mysterious things about gasoline engines is that for months they may operate in an entirely satisfactory manner, and then some day, without a moment's warning, they will begin to give trouble, and apparently for no reason at all except "pure cussedness." If one believed in the transmigration of souls he might be led to believe that some anarchist's soul had gotten into his engine, and, still believing in the propaganda of his earthly existence, that there should be entire absence of law and order, was now endeavoring to put his theories into practice by upsetting all the laws of the natural sciences, or of physics and chemistry. Generally, however, this "cussedness" may be traced to some lack of information on the part of the operator of the engine or to his forgetfulness.

For instance, one of the easiest things in the world for a gasoline engine operator to forget to do at this season of the year is to drain the engine cylinder jacket of water in the evening. Then some cold morning when he gets his engine started up he will find that the water in the cylinder has been frozen and has burst the jacket, sometimes even cracking the inner shell or cylinder walls. In many cases these cracks can be patched, it depending on their location and how bad they are. But even if the cylinder can be patched, it seldom presents a neat appearance and the value of the engine is greatly reduced in case the owner ever wishes to dispose of it. If the inner walls are cracked, however, nothing but a new cylinder will suffice. Here is where the owner is fortunate if he has purchased an engine which has the cylinder made separately from the bed, as he does not have to buy a new bed as well as a cylinder. These separate cylinders also allow for expansion and contraction to better advantage than where the bed and cylinder are cast solid.

So forgetful are some people that one lesson is not enough; and I have known of several cases similar to one which occurred last autumn. An engine located in a grain elevator was allowed to freeze and it burst near the valves, where it was impossible to patch it. As the piston had worn somewhat it was necessary to return it to the factory to have the new cylinder bored to fit it. The new cylinder and the freight amounted to not less than \$50, the engine being a small one. The repaired engine had not been in operation a week until the very same accident occurred again, and the parties had to expend another \$50 for "experience's sake," aside from the lost time while the engine was shut down.

One of the mysterious things, however, is that an engine will start easily in moderately cold or warm weather, and then in very cold weather it will absolutely refuse to move until a dozen or more trials are made. Here is where a knowledge of the theory of the operation of the engine will help the befuddled and disgusted engineer. What is commonly called a "gasoline" engine should be called, more properly, a "gasoline and air" engine; that is, it requires a certain proportion of gasoline to air to make an explosive mixture. If more or less of gasoline or gasoline vapor to a certain amount of air (within a certain range of ratios) is used, there will be no explosive charge, and the hot tube or the spark will fail to ignite the charge and the engine will not start. Let us consider now the different conditions of weather and of the engine under which the gasoline engine has to start.

First—In moderately warm weather the operator learns by experience that it takes about so much gasoline to start the engine. When this starting or priming charge is drawn into the cylinder part

of it is condensed by the cool cylinder and the remainder is left in the form of gasoline vapor, making an explosive mixture with the air, and this mixture is ignited by the igniting apparatus, giving the first impulse and starting the engine.

Second—In very cold weather, in starting up in the morning, the engine cylinder is very cold. If the operator uses the same amount of gasoline for the priming charge that he does in moderately warm weather the greater part of it is condensed by the cold cylinder, and there does not remain enough in vaporized form to make an explosive charge, so that when the igniter acts no explosion results. In other words, there is not enough gasoline vapor to the amount of air to make the proper proportion to explode. The remedy for this is, of course, to use more gasoline for the priming charge, so that there will be sufficient in the form of vapor to ignite.

Third—When the engine cylinder is exceedingly hot, as when it has been shut down for an hour at noon, or for some other reason, after the engine has been running, if the same amount of gasoline that is used in moderate weather is drawn in there will be practically none of it condensed and the charge will be too rich to ignite; that is, there will be too much gasoline vapor to the amount of air to form the proper proportion to explode. This condition being the opposite of the one secondly named, or when the cylinder is very cold, the remedy is the reverse—use a less amount of gasoline in the starting charge.

A common habit in starting, in case the first charge does not explode, is simply to put in another charge and try again. This may be all right if the first charge was too small; but if it was too rich, it will only be made the richer by the second or following charges and the engine will be still less likely to start. If the first charge does not ignite the air-cock on the cylinder should be opened and the fly-wheels turned by hand to blow out the first charge. Then start over.

Another source of trouble at this time of the year is the weakening of the battery. During the spring and summer seasons the engine has probably been running during long hours and on heavy load, and by the time the busy season is half or fully over the battery needs renewing. Many people are deceived in the strength of a battery. They may test the wires together or on the engine, and may think they are getting a good spark, but it may not be large and hot enough, and in the dark would look rather pale and greenish as compared with the white, hot spark of a strong battery.

Another result of long and heavy use of the engine is that the muffler plates may be clogged up with burned grease and oil from the cylinder, especially if there has been a surplus of oil used for lubricating. This vaporized and burned lubricating oil will bake fast in the perforations of the muffler, causing a choking of the exhaust and a back pressure in the cylinder. This results in greatly decreased power as well as increased fuel consumption. The reason is that the incoming charges are fouled by the burned gases which have not escaped and this decreases the force of each explosion, making it necessary for the engine to take more frequent explosions (in the "hit-and-miss" type) to maintain the load. In the throttling type of engine the size of the charges will be increased, likewise increasing the fuel consumption. One of the easiest ways to clean the muffler plates is to separate them and put them into a fire, which will burn off this grease.

Still another effect of busy times, in cases where the engine is run with water which is muddy or which contains lime or other material in solution, is the filling up to a greater or less extent of the waterjacket space. An engine recently examined showed that the lower part of the space was practically filled with mud that had become baked in, and which had to be taken out with a hammer and chisel. When the engine was running it actually got so hot that it smoked and burned the paint on the outside, and it would, of course, cut up the cylinder and piston the same as if no circulating water was used at all.

These are some of the things which should be looked after at this season of the year; but there are also many others. As soon as time permits the engine should be shut down and gone over thoroughly and cleaned up. Of course this should be done from time to time throughout the year, but once or twice every year there should be a very thorough cleaning. Any parts which are out of adjustment from slight wear should be adjusted or renewed. The importance of studying the engine cannot be too much emphasized. Next to this the most important thought of the gasoline engine operator should be: "Keep the engine clean and in adjustment." By following this rule the engine will give much more satisfactory service at a less cost for care as well as for fuel, and it will last two or three times longer than it otherwise would.

MATTOON ELEVATOR COMPANY.

Mattoon and Dorans, two stations of the Mattoon Elevator Company, are both located in Coles County, one of the counties of the famous corn belt



DORANS ELEVATOR OF THE MATTOON ELEVATOR CO.

of Central Illinois. Mattoon has the Illinois Central and Big Four lines and Dorans the Illinois Central, so that shipping facilities are first class.

The Central Illinois corn belt is distinguished for its fine country elevators; and the houses of the Mattoon Elevator Company at the stations named



MATTOON ELEVATOR OF THE MATTOON ELEVATOR CO.

are among the best, as may be judged from the accompanying engravings.

The home house at Mattoon is new and thoroughly modern, with 40,000 bushels capacity and machinery operated by electric power. The elevator at Dorans has 30,000 bushels' capacity, and is also equipped with modern machinery, operated by gasoline engine.

The claim of Sumner County, Kan., of being the largest wheat producing county in the United States is contested by Cass County, N. D. The latter's crop for this year is placed at 7,250,000 bushels and for 1898 at 10,500,000 bushels. The average in 1899 was 19 bushels per acre; in 1898, 17½ bushels.

The Canadian Northern Railway will not be able to complete its line to Port Arthur before November of this year. It was expected that this extension would be finished by October 1, and grain rates were then to be reduced 2 cents per 100 pounds, but neither of these desirable advantages will be available to the Canadian grain shipper until too late in the season to be of any value.

GENERAL TRADING RULES.

[A paper read by C. A. Burks of Decatur, Ill., at the annual meeting of the Grain Dealers' National Association at Des Moines on October 2, 1901.]

Having a desire to advance the commercial character and promote the general interests of the buyer and seller of grain throughout Illinois and at terminal markets, and wishing to inculcate just and equitable principles in trade, establish and maintain uniformity in commercial usages as far as the grain trade is concerned, and, with a view to avoid as far as possible controversies and misunderstandings arising in the trade because there has been no established set of rules applicable to the trade in general, the officers of the Illinois Grain Dealers' Association appointed a committee to draft and present a set of rules at the last annual meeting, in the city of Decatur. These rules were referred to this meeting of the National Association for its consideration.

There is not an operator of a country elevator, nor a buyer of track grain, nor a commission firm at a terminal market, but is interested in having a just and equitable set of rules governing the trade in general. More especially is this true of firms that buy grain by sample or to arrive, grade guaranteed, or on track, terms guaranteed.

All of the larger and more prominent market centers have their own specific rules as laid down by the various boards of trade governing the handling of spot grain, be it either sample or elevator stock. But there is another line of trade which has been springing up within the last few years—that of selling grain loaded on the various roads, regardless of rates or conditions, the seller having the option of shipping within time specified.

This system of buying and selling has become quite popular with the country shipper; and many of the leading dealers in the larger as well as the smaller market centers are carrying on a system of track buying—some exclusively, others in connection with their receiving business. This system of trading is carried on not only by domestic dealers, but by exporters, both direct and through brokers. There is more grain sold on track by the country elevator operators to-day throughout the grain-producing area of the United States than upon any other method. It is from this new line of trade that the demand comes for a set of rules to govern these purchases and sales. The miller has entered this trade and finds the need of them. The exporter, located either on the lakes or on the coast, feels that something should be done to avoid misunderstandings and controversies which are creeping into his business daily.

Indeed, the farther the buyer is from the seller the more the need of a careful and distinct understanding, for reasons well known. The interior track buyer also appreciates the fact that in order to avoid controversies and adjust differences, a code of rules ought to be adopted by the trade, which will be considered official. The seller, too, is equally as much interested in this move as the buyer. Indeed, the buyer's and seller's interests are identical on this point. There is no organized body of grain dealers that is in a better position to take this matter up than the Grain Dealers' National Association.

There was never a time when the grain business was conducted on such close margins and when both buyer and seller demanded a clear and definite contract. These contracts should conform to an established code of rules which should be recognized by the trade as official. The time has passed when mere guesswork goes. All grain men are supposed to be honest and sagacious, but unfortunately many of them differ in opinion. Their ideas concerning what should and what should not be done under certain conditions varies as much as the markets themselves.

The time has come when we should know what should be done by both buyer and seller to make a sale or purchase binding—what constitutes a bid; when it ceases to be in force; when a track sale is filled; what shall be done in case grain is not shipped on time; what relation the seller bears to

freight rates when they advance; can the purchaser change billing instructions during the life of the contract; is the seller responsible if the railroad does not furnish the kind of cars ordered; who should be responsible for underloading of cars; who should pay demurrage; what should be done with deficits and surpluses on contracts; has the buyer a right to cancel, extend time, or buy in unfilled sales if at date of expiration of contract they are not filled; how about off-grades and misgrades on contracts; drafts, how should they be drawn and within what per cent of invoiced value; what is meant by immediate shipment, quick shipment, prompt shipment; in specifying days' shipment, should the day of sale, holidays and Sundays be included; how about sales terminating on legal holidays or Sundays; what is the full significance of the word "terms" in the grain trade; which of the contracting parties is responsible for the delay in transmission of messages; who is a "regular" dealer; and how is he to be known; who should pay for the sending of telegrams?

These, together with hundreds of other questions, are arising between the buyer and seller every day, and all, too, without any definite set of rules to govern. The exporter has his prescribed rules when selling abroad; each of the larger and many of the smaller markets have their

were not without fault. There were many additions, some alterations, and a few omissions which should have been made. Your committee has given them careful consideration and begs leave to recommend their adoption.

THE RACINE WAREHOUSE MILLS AND SEPARATORS.

For over twenty-five years the Johnson & Field Manufacturing Company of Racine, Wis., have been building grain cleaning machinery. This practical experience has given them a very comprehensive understanding of the requirements, not only of the farmer, seedman and small dealer, but of the large warehouse and elevator man as well.

They have not only kept their machines in the front rank at home, but by giving special attention to the requirements abroad have built up a splendid export trade. "Racine" Fanning Mills and Separators are now to be found in nearly every civilized country on the globe. The export machines are built on the same principle as the regular ones and contain only such changes as will permit them to be knocked down and packed flat for shipping. Wood screws and bolts are used in place of nails in these machines. To meet the climatic conditions of Mexico and South America they build a

A TWENTY-FIFTH ANNIVERSARY.

A most interesting dinner party took place at the Union League Club, Chicago, on the evening of Tuesday, October 1, when Mr. T. K. Webster, founder of the Webster Manufacturing Company of Chicago, entertained some twenty-five gentlemen connected in an executive capacity with the Chicago, New York and Kansas City offices of the company, in honor of the twenty-fifth anniversary of the founding of the business.

The dinner served, the following brief but most interesting program of addresses was given:

"Short Review of the Business"—Towner K. Webster.

"Seeds"—Dr. John H. Boyd.

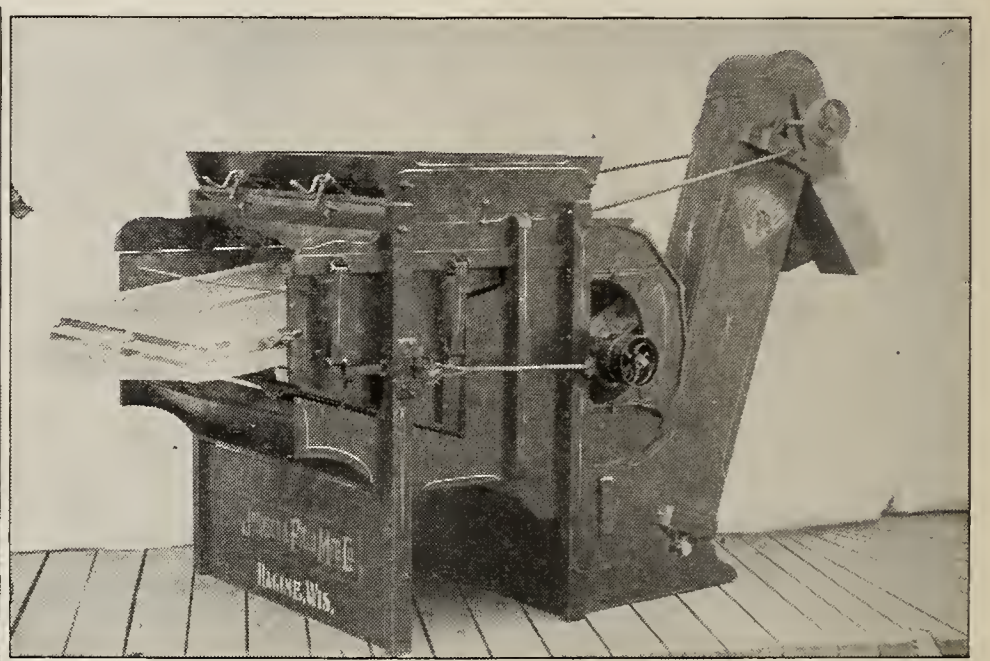
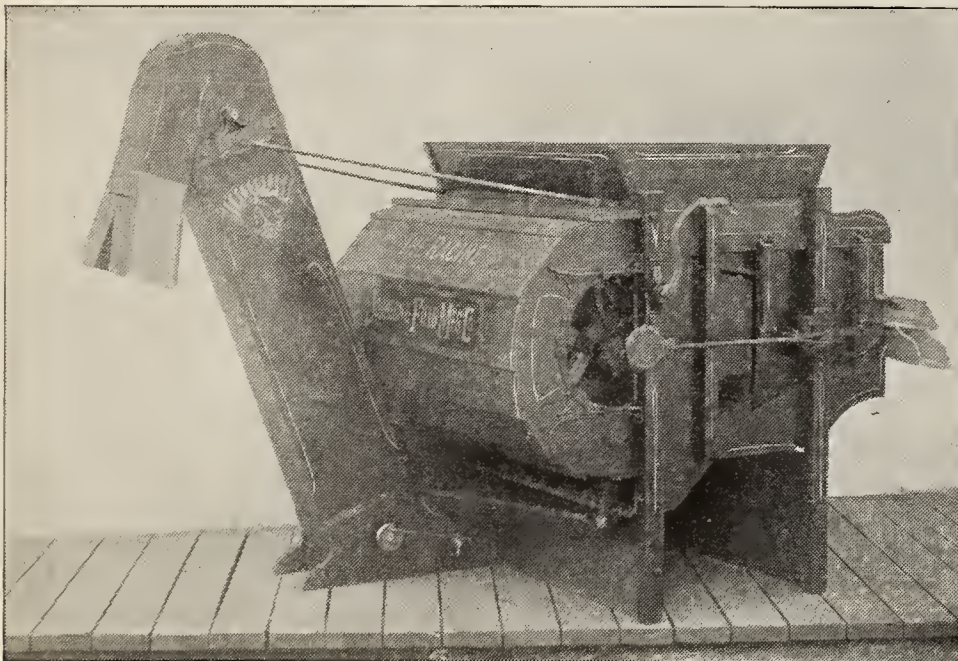
"Growth"—David R. Forgan.

"In Reminiscent Vein"—John P. Lenox.

"As Seen Through a Boy's Eyes"—Henry K. Webster.

"Some Echoes of a Storm"—George N. Stone.

The souvenirs of the occasion were a handsomely engraved statement in figures comparing the initial and twenty-fifth years of the business, together with pictures of the plants of 1876, 1883, and 1901; and also miniature gold badges representing the well-known "Acme" elevator bucket on a belt.



RACINE WAREHOUSE MILLS WITH ELEVATING AND BAGGING ATTACHMENTS.

rules governing spot transactions. Why should not the National Association adopt rules governing buying and selling of grain on track, to arrive, grade guaranteed, and by sample, and thereby fill that "long-felt want" that every new institution and association is striving to fill? There is no one thing which the National Grain Dealers' Association could do to-day for the grain trade throughout the grain-producing portion of this country that would be of more general benefit than the compiling and adoption of a set of equitable and just rules governing the transactions of seller and purchaser of grain on track or to arrive.

The time has come in all lines of trade when well-trained and up-to-date men and methods are needed. Old-fashioned ways of doing business are being replaced by the more advanced. The grain trade is no exception to the rule. A new epoch has made its appearance. New demands are made upon us and we must meet them. The new is crowding aside the old—improvement is the order of the day. The demand has been made and we must meet it. We must not grope in darkness longer. We must be alert to our own interests and meet this new requirement. There is no better time than now; neither is there a better place or channel. We do not mean to say that this is the only demand that we are called upon to face, nor the only matter needing our attention.

We feel that this Association is equal to the emergencies of the day. We have with us to-day men of large, liberal, and energetic minds. Men who are ready and willing to do and to dare. We believe they feel the importance and need of a set of rules. Those presented at the Illinois meeting

line of cleaners with extra heavy framework and irons.

The accompanying illustrations show the Nos. 2 and 3 mills, with bagging attachment. These are larger than the farm mills, but can be operated by either hand or power. Each mill is provided with tight and loose pulleys. The elevator and bagger can be quickly attached or detached from the mill. It is operated by a belt from the mill.

The No. 2 size has sieves 40 inches wide and 25 inches deep; No. 3, 48 by 25 inches. The machines, together with the No. 5 Single Dustless Separator and the No. 6 Double Dustless Separator, are much used by elevator men, millers, seedsmen and warehouse men for cleaning and grading wheat, oats, corn, barley, peas, beans, rice, flax, millet, timothy, clover and other grass seeds and grain. They are also exported to South America, Mexico, Australia, New Zealand, South Africa, Germany, Holland, and Russia, where they are also variously used for cleaning and grading coffee, corn meal, rice, lentils, etc.

These machines are all well made from selected hardwood lumber, thoroughly seasoned and kiln dried. The irons are of the most approved pattern with all wearing parts chilled. They are supplied with eccentrics and shake rods, connected with elbows by bolts on both sides, making a double protection, as either side will run the mill.

The makers will be pleased to supply illustrated catalogs, prices, etc., on request.

The plant of the Glucose Sugar Refining Company at Peoria has resumed operations with 1,000 men at work.

which were presented to each guest as mementoes of the occasion.

With a cash capital of \$31.66, Mr. Webster started the career of the Webster Manufacturing Company in a small frame workshop at 13 East Kinzie street, in October, 1876. Working under many adverse conditions, with a few hand tools, Mr. Webster's sales for the first year amounted to \$7,693.57. The sales for the present and twenty-fifth year will figure close to one million of dollars. Their modern plant on West Fifteenth street occupies 3¼ acres, where are employed to-day 400 hands in the manufacture of the most approved labor-saving machinery and appliances for the equipment of grain elevators, mills and factories.

The record of the twenty-five years is one to be proud of, surely.

THE WEEHAWKEN ELEVATOR.

The foundations for the New York Central's new grain elevator at Weehawken, N. J., on its West Shore line, will be finished by the first of next year, and one-half the elevator, with 2,000,000 bushels' capacity, is to be completed by October 1 next. The entire cost of the elevator will be \$1,800,000, and of freight sheds adjoining \$200,000.

The work will be executed by the Chicago firm of George M. Moulton & Co., architects and engineers, and the Chicago construction will be used throughout. The present methods of handling grain by lighters are to be supplanted by the modern methods.

The new elevator will be of fireproof construction and cover an area of 35,750 square feet. The

frame will be of steel and the wains of brick and hollow tile. The bins will be of steel, 72 feet in depth, and square instead of cylindrical. The motive power for operating the machinery will be electricity, furnished from a central station.

JOHN L. DEXTER.

John L. Dexter of Detroit, who has in a few years become one of the most prominent flour and hay dealers of Michigan, is a native of Mattapoisett, Mass., where he was born April 4, 1859. At the age of sixteen, and after graduating from the high school of his native town, he went to New Bedford and entered the counting room of Jonathan Bourne, who was at that time the largest individual owner of whaling vessels in the world. With this shrewd New England merchant Mr. Dex-



JOHN L. DEXTER.

ter obtained the thorough business training to which he attributes his successful career since.

After eight years of "all work and no play," Mr. Dexter was offered and accepted a situation as head bookkeeper and afterward as salesman of the Union Mills of Detroit, then owned by Boston capitalists, where he remained four years and acquired a thorough knowledge of the flour, wholesale and retail, business. In January, 1886, he engaged in business for himself as junior member of the firm of W. H. Sawtelle & Co., having entire charge of the firm's western business.

In April, 1891, the present firm of John L. Dexter & Co. was formed by Mr. Dexter and P. A. Ducey (as special partner), who bought out the interests of the old company. Under Mr. Dexter's management the business has steadily increased, until now they occupy a place in the front rank of the flour jobbers of Detroit. Mr. Dexter is also the Michigan agent of the Pillsbury-Washburn Flour Mills Company of Minneapolis, controlling the product of those mills in Detroit and for the five counties in the southern part of the state. The firm of John L. Dexter & Co. does also a large business in hay and salt.

After nearly twenty-five years of business life, Mr. Dexter enjoyed the satisfaction of never having asked for a situation, of never having been discharged from a position, and of having worked for but two firms. His prominence in the hay trade of Detroit, as well as his personal reputation as a business man, caused him to be elected a director of the National Hay Association in 1899 and 1900. He acted as chairman of the membership committee in the convention of 1901.

New grain elevator rates promulgated by the New York City Fire Insurance Exchange are New York Central (allowance for sprinklers made in rate), \$2; Pennsylvania (same), \$2; West Shore (same), \$2; Erie (not sprinklered), \$3.75.

ONE EFFECT OF THE CALIFORNIA STRIKE.

The wheat growers of California have been aroused to action by the strike of grain handlers at Port Costa, which has made it impossible to move grain to market or to load for export. When the men ceased working their places were filled with non-union laborers, but so great was the intimidation against those that it was found impracticable to retain the new men in any considerable numbers, and the grain accumulated in the warehouses in great quantities and kept back from market the grain in farmers' hands and at interior primary points. Much of this newly harvested grain was poorly protected from the weather and was damaged. The clamor for a quicker movement of the crop became so loud that many volunteers were ready to go to Port Costa and take the places of the strikers, if necessary. It was seriously proposed at one stage of the difficulty that the farmers do this, but instead they met in convention at Sacramento, September 25, and after full discussion adopted the following resolutions:

Resolved, That the grain growers of this state do organize a co-operative association for the purpose of securing cheaper rates of transportation, even if it be necessary to have our own agent to market our grain.

Resolved, That we submit to the grain growers of the state the following compact for their signatures:

"The undersigned hereby agree, each with the other, to form a co-operative association under the laws of this state, to meet at the call of the president to perfect such organization, which shall be for the purpose of obtaining cheaper rates of transportation for our grain, and for such other purposes as the signers hereto shall prescribe.

"Each signer hereto has paid the sum of \$5 to the person authorized by Hon. G. W. Pierce, president of the convention which met at Sacramento, September 25, 1901, for the purpose of paying the expenses of the organization, and such payment shall be credited on membership fee or dues."

Resolved, That the president of this convention appoint at least one canvasser for each county, upon the recommendation of the local bank or banks, to get signatures to the foregoing compact, and that the said canvassers shall be paid from said subscriptions the sum of \$1 for each paying subscriber, and said canvassers shall pay over to the local banks once a week all the moneys collected, which banks shall in turn pay the same to the National Bank of D. O. Mills & Co. of Sacramento, which is hereby made the depository of said funds, to be paid out on the order of Hon. G. W. Pierce, president of the convention.

This plan was agreed upon after a more elaborate scheme of co-operation, involving the conduct of a general grain and transportation business by the farmers of California, was rejected. Judge Swinford, P. K. Laugenour and Joseph Craig were appointed a committee to arrange for a subsequent convention under the provisions of the above agreement.

CROP REPORTS.

The National Hay Association at its late annual meeting adopted the following report of a special committee on "How to Get an Accurate Government Report on Grain and Farm Products." The committee had before it a paper by H. S. Grimes of Portsmouth, Ohio, whose views on this subject are familiar to readers of the "American Elevator and Grain Trade." The report, it will be seen, substantially endorses Mr. Grimes' views. It says:

"That after careful consideration of the matters and things therein presented we recommend that this Association by resolution endeavor to secure suitable legislation looking to the establishment of a system of crop reporting and scheduling of the statistics either under the Agricultural Department or under a permanent census bureau, to be organized with the present census as a nucleus.

"That the system now in use by the Agricultural Department be the foundation and plan upon which to secure reports; that the reporters, whether county correspondents, township correspondents, or state statistical agents, be paid for their returns. That the reporters report independently on the 1st and 15th of each month the acreage and condition of the various crops, and that the tabulated crop reports be published on the 10th and 25th of each month.

"We believe this to be the only practical way in which to secure accuracy and uniformity. The payment of salaries will be an incentive to the reporter to study the subject, become familiar with

his duties, and should he fail his successor could be easily obtained. The bureau would be independent and could demand of its reporters good work. This the Agricultural Department can hardly do now, certainly not as effectively as if the reporters be paid. Respectfully submitted."

M. W. LEE.

M. W. Lee, general manager of the Way-Johnson-Lee Company, 606 Corn Exchange Building, Minneapolis, Minn., was born on Feb. 6, 1865, at Raymond, Pa., coming west in 1870 with his parents, who settled in Eastern Nebraska. After engaging in a number of business pursuits, all of which proved more or less lucrative, Mr. Lee, in 1889, began his career in the grain business at Alcester, S. D., the principal part of his duties at that time being the operation as engineer-in-chief of a wheelbarrow line, running from a flat house to a car. His rise from this obscure position to be the virtual head of the Way-Johnson-Lee Company has been a rapid one.

In 1891 he formed a copartnership with G. W. Orton at Maurice, Iowa, under the firm name of Lee & Orton, but later he went on the road soliciting consignments for a prominent Chicago grain house, although still retaining his interest in the Maurice elevator and adding to his holdings of this sort one at Dunlap, Iowa, and also an elevator and lumber yard at Valparaiso, Neb. In 1898 Mr. Lee disposed of his elevator property and associated himself with T. A. Way and Phil S. Reed, who operated under the corporate name of the Northwestern Iowa Grain Company of Mason City, Iowa, of which Mr. Lee took the active management. The advance of this company under his



M. W. LEE.

initiative has been very rapid, growing from a small line of elevators on one line of railroad, until the company now has elevators on six lines of railroads in Iowa, besides lumber yards at various stations. In July of the present year R. P. Johnson, a prominent capitalist of Northwood, Iowa, became a heavy stockholder in the company, and the name was changed to Way-Johnson-Lee Company and the headquarters moved from Mason City to Minneapolis.

Mr. Lee is an active grain association man and acceptably filled the office of secretary of the Iowa and Dakota Grain Dealers' Association from 1894 to 1897.

In accordance with the ruling of the attorney-general of Minnesota, all elevators or sidings will be required to take out public elevator licenses.

The first car of wheat from the new wheat belt of which Dominion City is the center reached Winnipeg on August 20. It was graded as a fine sample of No. 1.

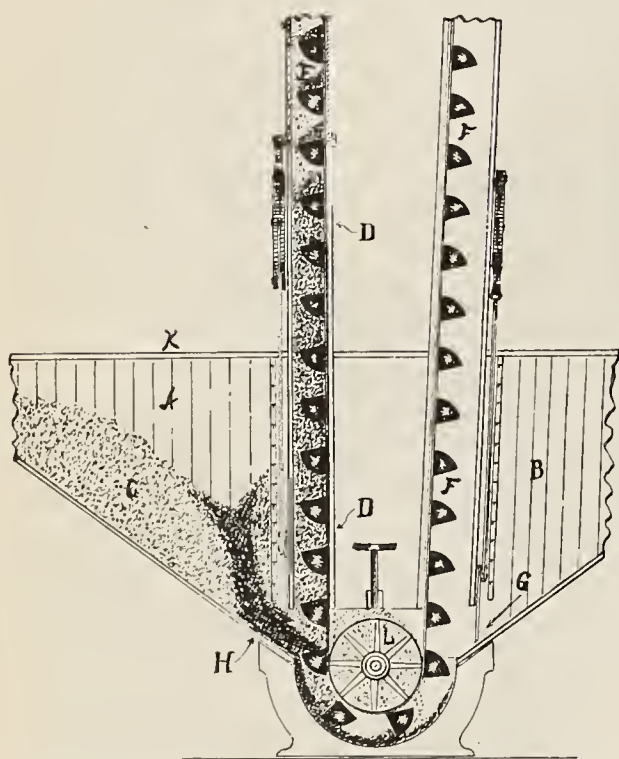
[For the "American Elevator and Grain Trade."]
**ON THE CAUSES AND EFFECT OF
 CHOKES.**

BY FRED C. BLODGETT,
 Superintendent Pillsbury Elevator, Minneapolis.

Until recently, comparatively speaking, I have been a martyr to the freaks of elevator legs for many years, and I have therefore been much interested in the several articles appearing in the "American Elevator and Grain Trade" on the subject of chokes. The question of fires originating from them has been so well handled by Mr. Gill, the insurance inspector, that I will confine myself to the subject from the elevator man's standpoint, or, to be more explicit, will try to show the causes and effect of chokes, together with the annoyances, anxiety and expense they make.

Franklin Hall very properly places the overfull bin as the one prime cause in country houses, but I take issue with him in saying that it is the only cause worthy of consideration. I believe a very large majority of elevator operators will agree with me that the various other causes of chokes in the aggregate far outweigh overfull bins and should be reckoned with accordingly.

I also take Mr. Hall to task for asserting that feeding from the back pit is an indefensible practice.



Grain is all received in the front pit, but afterward is mostly handled from the back. This cannot be otherwise in the ordinary country elevator, for the reason that it cannot be spouted to the front.

I will here mention some of the other most common causes of chokes, to wit: Slowing up of motive power, slipping of belts, drawing from bins containing dry and damp grain, collection of grain on pit hoppers in drawing from bins, and the mass sliding into the boot; also obstructions in the head spout carried therewith in the grain, as, for instance, empty grain sacks, bunches of hay, straw, rags, paper or blocks of wood. All these are commonly found in farmers' loads of grain. I have had a head spout clogged with a farmer's dinner box, dinner included.

Chokes are primarily from many causes, but the secondary action is the same in all cases, namely, a delivery of more grain to the boot than can be carried away by the cups. Whether it be by hauling it through the head, owing to an obstructed head spout, or by feeding too fast, or by falling away of the speed, the final conditions in the boot and leg are exactly the same.

Referring to the cut herewith—an open view of the lower portion of a leg is shown in process of choking, presumably from a lagging engine. A shows the front pit partly filled with grain, marked C. DD shows the surplus grain which has passed through the feed opening, H, and been pumped up the leg casing by the cups. E shows the overfull cups after passing through the blockade of grain. FF shows the empty cups re-

turning; G, the back feed gate; B, the back pit; K, the working floor and, L, the boot pulley. The dark shaded part of the grain near H shows its movement when the leg is working normally.

Referring again to the cut, when the grain rises in the leg, as shown by D, the motion of the belt is retarded and slowly but surely comes to a standstill. If before losing too much speed the feed gate should be closed, the empty cups, FF, quickly carry away the blockade, DD, and the belt at once resumes its normal speed. Therefore, I will say that the only way to prevent a choke produced by any of the several causes is to stop the flow of grain to the boot at the right time. The annoyances of choking legs are unbounded, and constant watchfulness only partly prevents them at best. A leg has choked in my elevator with a man on watch, with his hand on the feed lever and nothing to do but keep it from choking.

The damage from chokes is great in large plants—and in smaller ones is in proportion—in mutilated cups and belts, burned belts and frictions, broken shafts, etc. Besides there is the loss of the time of the plant and of the men, which is sometimes for days, but more often hours.

The legs of our elevator are equipped with small automatic machines for preventing chokes, which, with us, have from long use proved an entire success. In case the leg begins to choke, they close the feed gate at exactly the right time. They are practical in all respects and seem to be durable.

Most elevators in this city have machines for the same purpose, but are, I think, different from ours. I have heard good reports from some of them, and believe they are generally satisfactory. We can do at least 15 per cent more elevating in a day than formerly, as we now feed full cups and leave the legs in care of the machines.

NEW ELEVATORS AT DULUTH.

It is announced that McCarthy Brothers & Co. of Duluth and Minneapolis will build a 2,000,000-bushel steel elevator and tanks at Rice's Point, Duluth. The elevator will have a capacity of 400,000 bushels and the tank annex 1,600,000 bushels. The site recently purchased by them is 580x1,500 feet and cost \$21,000. It lies just north of the Peavey Elevator at Duluth, with the two concrete annexes. Work will be commenced at once.

It is also reported that the Pioneer Steel Elevator Company of Minneapolis will erect a grain elevator in Duluth this fall and winter. This company owns property on the outer end of the same slip on Rice's Point that the McCarthy elevator property is located on. The Pioneer company has intended to build on this property for two years, but has deferred the improvement from time to time.

Surveyors are now at work on the site of the proposed elevator of the Omaha Railway at Allouez Bay, West Superior, Wis. It is believed that the second of the Omaha's proposed system of three elevators is to be built there this winter.

The Milwaukee & St. Paul also is arranging to have its terminals at Allouez Bay, and predictions have been made that this road will build warehouses and elevators there, and that the Soo and Great Northern may do likewise.

FLOATING ELEVATORS.

The floating elevators in New York and Brooklyn harbor have been experiencing a very dull season, six of those of the International company being tied up at the Atlantic dock, while the balance of the lot were more days idle in September than busy. This is unusual. For three or four years past this floating elevator plant has been coining money, while the stationary elevators have been practically idle. To meet the requirements of the modern ocean liners some of them have been enlarged to a capacity of 15,000 bushels an hour, and the company has been paying dividends of from 9 to 15 per cent for years past, as the floating elevators practically did all the grain loading of the port. The leading authorities in New York see no immediate prospect for an improvement of conditions in the export grain trade from that port.

HISTORICAL REVIEW OF THE GRAIN TRADE OF THE NORTHWEST.

BY F. H. PEAVEY OF MINNEAPOLIS.

[A paper read by the author at the annual meeting of the Grain Dealers' National Association at Des Moines, Iowa, on October 3, 1901.]

Ladies and Gentlemen: I esteem it a pleasure and a privilege to meet with you here to-day. I am especially pleased that our meeting should be in the good old state of Iowa—the state to which I immigrated from Maine away back in 1867, locating then in the northwest corner of the state at Sioux City, which at that time was 100 miles beyond a railroad. The journey from Chicago to Sioux City required three days and three nights. There is therefore a very large, warm spot in my heart for everything that pertains to the interests of this great and glorious state—and there is no greater state in this Union of ours.

When I travel, as I frequently do, through the northwest counties, I always enjoy sitting in the rear car of the train and reminiscing, going back to the old days when some of those counties were first settled—counties that are now large in population and settled by the best class of people, who have become wealthy and influential in the affairs of the state and the nation.

I was sidetracked in Sioux City for eighteen years; thence going to my present home in Minneapolis.

The subject on which I have been asked to talk—"The Growth of the Grain Trade of the Northwest"—gives me a great scope, and its complete treatment would require a large volume, as few people even in the grain trade itself have a realizing sense of the enormous growth of the grain business in this country during the past decade.

I will give you briefly my observations and experiences covering a period of thirty years, when one firm that I recall started in a feed store with less than a carload of assorted grain, and to-day this same firm, which has never changed its name, controls and practically owns elevators scattered throughout the country of an aggregate storage capacity of 38,000,000 bushels.

I first chanced to think how wheat was handled in Sioux City, Iowa, in 1867 (that section which now boasts of its magnificent corn crop and has its corn palaces, was supposed to be beyond the corn belt at the time I mention). In those days the aggregate wheat receipts were small, although the entire country to the west was tributary. Farmers delivered the grain in sacks and the grain merchant used his back to convey the wheat to one corner of the warehouse; later it was resacked and carted to a Missouri River steamboat and shipped to Omaha, the then nearest railroad point.

The small volume of business; uncertainty as to time of delivery; the necessity of using muscle in place of machinery; the lack of being able to hedge, all contributed to force the merchant to buy on a very wide margin, or to gamble that wheat would advance in price. The large majority of those who pursued the latter course died poor or are to-day without money or influence.

With the advent of the railroad came partitioned warehouses, and those among you old in the business will recall how we fought for hill or knoll locations high enough to spout to cars without re-handling. Later came the balloon elevator driven by one blind horse, with a fanning mill in the basement. Some of you will remember alternating between the mill and the horse, using the same stick for both.

What are now known as line elevator companies had their origin in the early '70s, and one of the first was located on the Dakota Southern Railroad (from Sioux City to Yankton, a distance of 65 miles, one of the first roads to invade Dakota), now known as a branch of the C., M. & St. P. Ry.

With the advent of the St. Paul & Pacific R. R. (now known as the Great Northern) and the Northern Pacific, and the tremendous immigration following, the line elevator man became a necessity. Material was carted miles in advance of the railroad, and at heavy expense elevators were completed by the time the tracks reached there. Business was

commenced with no banking facilities and in many cases with no other building in sight; wheat receipts were heavy; steam power was used; currency was shipped from Minneapolis to the nearest express point and then sent by special messenger to the side track elevator man, whose life was lonely and whose pistol was ready to protect the money and property in his charge.

About the same period the St. Paul & Sioux City R. R. (now known as the Omaha) was completed and established an elevator line of its own, all charges being included in the freight, thus preventing competition. Their houses would handle six to eight thousand bushels of wheat per day and were operated by steam with two unloading places. I have known farmers at Sibley (and I remember when the first man settled in Osceola County), and later at Laverne, Minn., to wait 24 hours and even longer to be unloaded. A line would be formed, horses or oxen unhitched and farmers would attend to their own wants; about once an hour or so all those in line would return with their horses, hitch and draw up, and this process would be continued until each team arrived at the elevator and was unloaded.

This method of handling elevators did not prove successful to the railroad company, who sold or leased them to other parties and confined themselves to their legitimate business of transportation.

To-day through the agricultural districts the grain buyer is usually located in advance of the railway agent, his elevator being completed before the station house is ready; as the country becomes more densely populated new towns spring up and new side tracks are put in, and hence we have a steady increase in country elevators, and in most cases the new houses are built of cribbing and operated by gasoline power. Through the older states the houses are owned by the independent buyer; in the Northwest the line elevator men predominate.

While the increase in the number of country elevators has been very rapid, the growth of the terminal elevator is still more marvelous. Terminal elevators are a necessity to transportation and commerce; they are the reservoirs which carry the product of the country until the grain is wanted for home or foreign consumption. It is impossible for the consumer to take the grain as fast as the producer rushes it to market, especially in the fall, and if it were not for the terminal elevators, backed by large capital and credit, cereal prices would be very greatly depressed. The necessity for the terminal elevators is most apparent to all thinking men. Large terminals are now contemplated, or are under construction, in New York, Boston and New Orleans, in the United States; and in Quebec, Montreal and Port Arthur, in the Dominion of Canada. When terminal elevators were first constructed they did not run over 300,000 to 500,000 bushels' capacity. One firm tore down an elevator the other day in Minneapolis that cost \$60,000; it didn't pay to run it, for its costs but little more to operate a 3,000,000-bushel plant. Those first terminal elevators were built of wood, with all the bins about 20 feet above the main floor, and all belts running perpendicularly; the houses cost about 30 cents per bushel capacity according to the kind and amount of machinery used. It was soon discovered that annexes could be utilized and they were constructed of cribbing with bins running to within a few feet of the ground. These annexes were used for storage purposes alone; bins were flat bottomed and were loaded and unloaded by conveyors from the working house; at first the old spiral screw conveyor was used; later the rubber belt, at first concave, but now perfectly flat. I think the longest single elevator belt in use is in one of the houses in Minneapolis—1,200 feet long. We adopted the horizontal belt system after I had personally investigated its advantages in Liverpool and London. The driving belt in all modern elevators has been superseded by the rope.

You will pardon me for being somewhat personal, but I have always aimed to keep abreast of elevator improvements, and ten years ago my firm became interested in the building of a system of three elevators in West Superior, Wis., of a total storage capacity of 5,000,000 bushels. The working

house of 1,000,000 bushels' capacity was located on the dock and the other two houses, running lengthwise, were connected by steel galleries, the three houses being placed 450 feet apart. We had previously lost heavily through fire by the use of wooden galleries and were at the mercy of the insurance companies—rates having become oppressive, and in addition there was not enough insurance in the country to go around when wheat was high priced, and with the transfer rates cut from $1\frac{1}{4}$ cents to $\frac{1}{2}$ cent per bushel it became imperative to adopt such improvement as would reduce the rates of insurance on grain. Mr. James J. Hill built in Buffalo the first steel elevator and it proved a success; he later built one in West Superior. Minneapolis has two and Chicago one. About two years ago the hollow tile tank system for storage was successfully adopted by some elevator companies. My firm was not entirely satisfied with either plan. We sought a material for elevator construction that would be absolutely fireproof, one that would grow stronger with age, would not require paint or repairs, and we decided upon the use of cement, and are now just about completing a plant in Duluth, costing between \$750,000 and \$1,000,000, that I believe to be the most complete and up-to-date elevator plant in the world. Men have come from Liverpool, Montreal, New York and elsewhere to investigate this system of



F. H. PEAVEY.

construction and we have had letters of inquiry from Buenos Ayres. In adopting the cement system of construction we did not act hastily, but made an exhaustive and intelligent investigation. We first noticed that the railway companies were using cement instead of stone for bridge work, and three years ago we quietly erected a circular tank 114 feet high and 25 feet in diameter, having an average thickness of 8 inches, as a test, and had it full of wheat from early fall until late spring (and most of the time since then it has been full of wheat), when the wheat came out dry and sweet. The following fall one of my partners, accompanied by an expert, spent three months in Europe, visiting Denmark, Germany and France, and went as far north as Russia, noting and investigating all structures built wholly or partly of cement. At Braila in Roumania, a large elevator was found owned and successfully operated by the government, built wholly of cement. Braila is situated on the Danube river, 30 miles from the Black Sea, and handles about 70,000,000 bushels of grain annually. Another member of my firm visited Italy and examined the cement used in the Colosseums in Naples and Rome over 2,000 years ago. I give you these details that you may know we spent time and money before arriving at a conclusion. Our Duluth plant has a capacity of 5,000,000 bushels—1,000,000 in the wooden working house and 4,000,000 in cement cylindrical tanks, each 104 feet high and 35 feet in diameter, these tanks being located 50 feet from the working house, and connected by five conveyors,

each capable of carrying 20,000 bushels per hour. About one-third of the cement part of this plant was completed last fall and in that part we carried 1,000,000 bushels of wheat all winter and spring without insurance, and we shall not carry any insurance on building or contents. We are justly proud of our undertaking, believing it to be in advance of any known elevator construction.

The most phenomenal growth of the grain business has occurred in the Northwest with Minneapolis and Duluth as terminals. When we commenced doing business through Duluth the elevator capacity of that city was 350,000 bushels; to-day it has a capacity of 32,000,000 bushels. Minneapolis in 1880 had an elevator capacity of 1,000,000; in 1901 its elevator capacity is 33,000,000 bushels.

Diverging a little it may interest you to note the immense growth of the grain option or speculative business in the Northwest. Citing Minneapolis alone, the first pit was put in on the floor about 14 years ago; afterward it was taken out on account of no business; a couple of years later it was again tried and succeeded, and since that time has grown to very large proportions. Last year the trades averaged nearly 8,000,000 bushels per day of wheat alone. The largest trade of any one day was 24,000,000 bushels of wheat—dizzy figures and practically the growth of ten years.

In the old times we have paid 20 cents per bushel freight charges on wheat from Duluth to Buffalo; to-day we regard a 2-cent rate excessive, and have shipped wheat for $\frac{3}{4}$ of a cent. In 1885 the all-rail rate from Fargo to the seaboard on wheat was 39 cents per bushel and this fall the rate has been 21 cents per bushel. In other words, the producer at Fargo can ship his grain to the seaboard and sell it for 18 cents less than he did in 1885 and still realize as much money.

In the old days the capacity of a freight car was 20,000 pounds. To-day it is 80,000 pounds. Twenty years ago the ship on the great lakes carrying 30,000 bushels of wheat was regarded of large capacity; ships of to-day will carry 250,000 to 275,000 bushels each. In those old times it took all day to load a small vessel with wheat; to-day there are elevators at Duluth that can load 150,000 bushels per hour into a steamship. Twenty-five years ago there was little or no corn raised north of Sioux City. To-day in the state of Minnesota the corn crop amounts to 40,000,000 bushels. In 1876 the receipts of grain at Minneapolis were 5,185,000; in 1898 they were 116,096,160.

My firm was first to build elevators on the Pacific Coast—building in 1889 and 1890 under the name of the Pacific Coast Elevator Company, a million-bushel elevator at Portland, Ore., and fifty country elevators in Oregon, Washington and Idaho, and it may interest you to know how the business is done there compared with the methods in vogue on this side of the Rockies.

The Pacific Coast grain elevator business entails more risk than that of this section of the country. I speak more particularly with regard to the Pacific Northwest. Warehouses are still most generally in use; farmers do not sell by the wagonload, but usually haul their entire crop to market in sacks and, with others, pile it out doors on dealers' platforms many tiers high. Each owner has his private mark on his sacks and will not permit his grain to be mixed with that of his neighbors, for each man knows he has raised the best quality (the buyer can only sample the wheat by plugging). Sometimes the wheat will remain piled in the way mentioned for a month or more; frequently the farmers will pool their holdings and auction off the whole lot, advertising the fact in advance. Sacks must be bought with the wheat.

The first strife among buyers is to secure the wheat for their own platforms, for each buyer receives the handling charge in case others should ultimately purchase it. Buyers work for this preference from early spring, loaning sacks, selling them on time, making advances on the crop—anything to get there.

The grain is shipped in sacks to the seaboard and is there trucked to and piled up in a warehouse in piles seven sacks high; it is thence loaded into sailing vessels for a four months' voyage to Europe

around Cape Horn. Most cargoes, not sold in advance, are billed to Cork, Ireland, for orders.

Early in the crop year samples are gathered of Walla Walla Valley and Palouse Valley wheat, and by mixing them together, or by taking each valley by itself, one is supposed to secure a fair average quality of the crop. Samples of the same are sent to different European markets and hence the speculative grade is known as the f. a. q. grade. France likes light bread, while England is partial to strong bread, thus the Pacific Coast wheat is the most popular in France, while England favors our northern wheat.

Grain vessels going around Cape Horn cannot be loaded to over one-fourth bulk on account of damage from cargo shifting. Upon arrival across the water the grain is transferred into what is known as millers' sacks and is thence forwarded to mills throughout the country. The business on the coast is attended with much more risk than we are accustomed to take on this side of the Rockies. There is no way to hedge and dealers are expected to make charters months in advance, which of itself is most speculative; but let it be borne in mind that the next decade will see a wonderful growth west of the Rocky Mountains, and with that growth the objectionable features of the grain trade on the Pacific Coast will undoubtedly disappear. You may not have noticed it, but Greater New York alone has a population 300,000 greater than the combined population of our Pacific Coast states.

In 1891 Mr. C. Wood Davis of Kansas City, a man prominent as a statistician and who posed for many years as the farmers' friend, prophesied that this country would within five years be an importer rather than an exporter of wheat, and this opinion was concurred in by some of the larger grain dealers of the country at the time. I then stated in an interview that I felt the time for importing wheat into this country was exceedingly remote. I feel to-day as I felt then, and I believe the grain business in this country is still young.

It was only last year that elevators were built in the extreme western part of Kansas and I think we will see the day when we will invade the state of Colorado.

Do you comprehend the magnitude of the agricultural products of this country? It may surprise you to know that in 1895 the agricultural products of the state of Iowa alone exceeded in value the mineral output of the entire United States, including the coal production of Pennsylvania. Since then, however, the conditions have somewhat changed on account of the large gold discoveries in Colorado and Alaska.

Many of you remember when General Hazen made his unfavorable report to the government on the Northern Pacific Railway project, stating the road as projected would traverse a barren desert; but much of that country is now dotted with the homes of prosperous farmers. This past season General Washburn of Minneapolis has been opening up the country north of Bismarck—a country supposed to be absolutely worthless for agriculture. I have driven with him over his survey, and from the observations I then made it appears that after getting twenty-five miles north of Bismarck the rain belt is struck, and the country will undoubtedly prove to be most productive.

My observation has been that the planting of trees and turning over of the sod attracts moisture. (I recall the time when the city of Sioux City paid a dollar a tree for each tree that was planted and lived two years.) I believe that what is now known as the Arid West will by artificial means be made an agricultural garden. I believe the canyons of Colorado will sooner or later be utilized as reservoirs, serving two purposes—confining the water in the spring and thus preventing the overflow of rivers, and later dealing it out as it is needed for irrigation purposes—and this work should be done by the government. Our Association should exert its best influence, collectively and individually, at home and in Washington, in the interests of irrigation by the government. The Snake River district alone, if irrigated, would produce millions of

bushels of grain, and with our fast increasing population and the Orient absorbing an increasing quantity of our Pacific Coast goods, we shall need more acres. We will find some good use for everything God has given us and we must tax our brains and energies to develop our endowment. Senator Warren of Wyoming, in a recent address, made the following statement:

"There now remains at the disposal of the general government unappropriated and unreserved land aggregating 900,000,000 acres; of this approximately 350,000,000 acres are in Alaska and practically all of the remaining 550,000,000 acres are in that part of the United States west of the Missouri River, once known as the Great American Desert, now called the Arid West, and destined in time to be freed from this implied designation of inferiority. To aid commerce the general government, since its establishment has dredged harbors, removed obstructions in channels, deepened river beds, built breakwaters and otherwise diverted and controlled waterways. The expected benefits of such aid cannot well be called local, for the territory to be subserved is as great in extent as the aggregate acreage of all the New England, Middle and Southern states and Ohio, Indiana, Illinois, Michigan and Iowa additional."

The railroads are the great civilizers and equalizers of the age, and famine cannot exist at one end of this country with plenty at the other. Wheat has been shipped from Oregon to Texas; Kansas wheat has found lodgment in Minneapolis and Minneapolis wheat in Kansas. Nebraska corn shipped to Duluth has been reshipped to Kansas City, and at the present time potatoes are being transported from Oregon to Texas. These moves are made as conditions change, which changes are hourly watched and the opportunities improved by the grain merchant. The farmers get the greater benefit, for the reason that competition is too keen or the opportunity is lost if one waits for more than a legitimate margin.

I have occupied every position in the elevator business and speak from personal knowledge and experience. I know how hard it is for the country buyer to allow his competitor to take the bulk of the grain even when he knows that the party is losing money on every bushel. I know how unhappy the traveling man is whose elevators rank second on the line. I know also that the cold, dry figures shown by the books in the main office constitute the keynote to the whole situation, for glory fades away at the end of the fiscal year if the balance is on the wrong side of the ledger.

I am a believer in men and that the best way to get along in the world is to be absolutely frank, open and above-board with one's competitors. The man who misleads or indulges in half truths not only is soon found out, but belittles himself in his own estimation and thus gives the honest and candid man the advantage.

Many a quarrel between buyers could be averted by openness and frankness. So far as line companies are concerned, I am quite positive that much trouble is brought about by the excess of zeal of our own men. We believe ourselves to be straightforward and honest, but we are prone to believe quickly anything bad that we hear about our neighbors.

There is no class of men in commercial pursuits who are given so large a financial credit as the elevator men. They are the medium through which the great crops of the country are collected and forwarded to all parts of the world, and in shouldering the heavy responsibilities involved in the scientific carrying on of this great trade they must of necessity have the confidence of the financial centers of the country. In the city of Minneapolis, the great grain center of this whole country—a position she is more firmly establishing every year—no class of men stand higher morally, socially and financially than the elevator men, and the confidence that is reposed in them as a class is based on the fact that they are known as non-speculators, confining themselves to the strictly legitimate business of dealing in grain, collecting it in small parcels and delivering it in large. I do not recall in all my long experience the ease of a

single elevator man who has ever failed in business except from two causes—speculation and mismanagement.

I think many country merchants place too much reliance upon the gossip they hear emanating from the various boards of trade. Much of the gossip circulating is written by men who are either long or short of the market, thus causing their judgment to be absolutely worthless; or, if not by men thus personally interested in the market, then by incompetent sensationalists, who are willing to tell you what to do, but have never done anything themselves.

These meetings are productive of very much good; they cannot be held too frequently. When we can have but one a year of the national organization let us have more than that of the state organization, and still more of the county organization, and have daily intercourse and exchange of ideas with our neighbors. Do not deceive yourself by believing that you know it all and your neighbor knows nothing. Do not deceive yourself by thinking that you have any advantages at terminal points that he does not also get. Do not make the mistake of imagining that you receive favors from the railroad company that your competitor does not also receive.

The object of this meeting to-day is to absorb and impart, and it will not be a success if we fail to get some good out of it. In one sense we are competitors, but in real fact we are partners. An advantage gained by one of us is of short duration and usually reacts. We must be systematic and watchful of details to be able to handle our business at the minimum cost. We will become bankrupts if we aim to secure the profits per bushel that obtained ten years ago. We must shrink our margins as the volume of business increases. Our field is larger, our opportunities greater and our competition keener, and to be successful we must change with the conditions and accept them as they exist to-day.

ELEVATOR IMPROVEMENTS AT JERSEY CITY.

The Pennsylvania Railroad Company is making improvements in its elevator at the foot of Third street in Jersey City that will double its capacity for handling grain. The handling capacity heretofore has been 100,000 bushels a day; the present improvements will double this capacity. It will then be possible to load a ship and yet use all the twenty-four legs for hoisting grain from cars. To accomplish this two large conveyor belts are being installed. Grain will be taken from a bin containing a known quantity and will be put on board a steamer by conveyor belt without reweighing. When the exact amount required cannot be had from one or several bins, a leg of the elevator will have to be brought into requisition and the wheat weighed in the same manner as when received. To now weigh wheat from a bin it is first run into the pit, hoisted to the hoppers, weighed and then sent to the belt gallery. This will be avoided as far as possible in the new elevator. The weighing facilities also are being greatly increased. Each weighing machine will be equipped with a single hopper with a capacity of 1,600 bushels, sufficient to take the contents of the largest ear without refilling.

The short crop of wheat in the Northwest last season reduced the annual earnings of the St. P. & S. Ste. M. (Soo Line) by no less than \$750,000.

A curious accident is reported from Pelican Rapids, Minn. Harry Frazee of that village had occasion to step into the M. & N. elevator there, and his dog, a magnificent specimen of his kind, followed him and got lost in the building. As Mr. Frazee stepped out onto the railroad track he heard the animal whine and not being able to locate him he whistled sharply, and at the same instant glanced upward and was shocked to see that the dog had made his way up the stairway to a height of 60 feet. The animal had heard his whistle and without an instant's hesitation leaped through a window and was dashed to pieces on the track at its master's feet.

GRAIN DEALERS' NATIONAL ASSOCIATION.

The sixth annual meeting of the Grain Dealers' National Association was held at Des Moines on October 2 and 3. In all respects the meeting was the largest and most successful ever held by the Association—its only meeting, in fact, which has assumed a national character. Every affiliated association entitled to delegates was represented on the floor, as was every important grain exchange west of the Alleghanies, as well as those of Philadelphia and Baltimore. The greater number of those in attendance arrived by special trains on the evening of October 1, the Kansas City and St. Louis representatives arriving on the morning of October 2, and those of Milwaukee on October 3.

When the proceedings opened at the Auditorium at about 10 o'clock on the morning of Wednesday, October 2, there were probably between 700 and 800 grain and grain commission dealers in the city. In the Auditorium, the Kansas City Board of Trade had secured the upper right-hand tier of five boxes for its members; Chicago occupied the ten lower boxes; while the Cereal Club of Des Moines and private individuals occupied the upper left-hand tier of five. The affiliated association delegates occupied designated places in the orchestra seats. St.

heretofore referred to, but in addition grow 1,200,000 bushels of flaxseed, nearly a million bushels of grass seed, 14,000,000 bushels of potatoes and 700,000 bushels of other vegetables; 3,000,000 bushels of apples and 250,000 bushels of other tree fruit; 12,000,000 pounds of grapes, and 100,000 bushels of other small fruit; 5,000,000 tons of hay, and we have left 8,000,000 acres in pasture, the product of which is worth \$20,000,000. We annually prepare for market 1,500,000 beeves and have 3,000,000 head of cattle left. We fatten and market 5,000,000 hogs and hold 4,000,000 on our farms. We stall-feed 500,000 sheep and clip 2,000,000 pounds of wool. We make 100,000,000 pounds of butter, produce 60,000,000 dozen eggs worth \$6,000,000, sell \$2,000,000 worth of fat poultry, and have stored for our consumption by 80,000 colonies of bees, whose industry is excelled only by that of our people, 7,000,000 pounds of honey, the equivalent of eight

the saving in expense of transportation and handling and water rates will insure the producer better prices and the consumer cheaper food. Our people understand all this and they are both contented and happy.

Following Gov. Shaw, Mayor Hartenbower of Des Moines extended a welcome to the city. Then Capt. M. T. Russell was introduced to tender the welcome of the Des Moines Cereal Club. The Captain, however, begged leave to offer a substitute in the person of Lafayette Young of the Des Moines Capital, a local orator now distinguished as having made the address putting in nomination at the Philadelphia convention Colonel Roosevelt for the office of Vice-President of the United States. Mr. Young said this was the first time Capt. Russell had ever sent a substitute; that only once before had he been guilty of trying to get out of anything, and that was out of Libby Prison. The welcome was alike eloquent and generous.

The first response to these welcomes was made by Charles England of Baltimore for the East. He said in substance that "it was the ardent wish of our late lamented President that there should be no sectionalism. With this idea in mind, I make response to-day. The East and West are bound to-day. Coming through on the train it was impossible to tell where the dividing line between the East



T. P. BAXTER, FIRST VICE-PRESIDENT.

Louis had headquarters in the foyer parlors. The entire audience room had been decorated with red, white and blue streamers, hanging from the ceiling in graceful loops, while the boxes and balconies were trimmed with sheafs of grain and ear corn in artistic designs. The box occupants were also designated by brilliant banners, that of Kansas City, "The Greatest Primary Winter Wheat Market," in red and gold, being particularly conspicuous at the sky line. Seats were provided on the stage for distinguished guests and officials of the affiliated associations; and directly behind these seats were blackboards showing prices in the grain and stock markets.

At 10 o'clock a. m., October 2, President B. A. Lockwood called the assemblage to order and introduced Governor Leslie M. Shaw, who welcomed the Association to Des Moines, and, extending the "glad hand," tendered not only the freedom of the capital city, Des Moines, but also a hospitality coextensive with the commonwealth of Iowa. His excellency took advantage of the occasion to refer to the varied resources of the state of Iowa, dwelling mainly, of course, upon those of the 35,000,000 acres included in her 300,000 farms. These farms in 1900 produced over 300,000,000 bushels of corn, 130,000,000 bushels of oats, 22,000,000 bushels of wheat, 12,000,000 bushels of barley and 2,000,000 bushels of rye, which would require 1,000,000 cars to transport to market. Continuing, Gov. Shaw said in part:

The lands of Iowa are now so used that we not only produce the 466,000,000 bushels of the ordinary cereals



B. A. LOCKWOOD, PRESIDENT.



G. A. STIBBENS, SECRETARY.

train loads of forty cars each, 20,000 pounds to the car.

Perhaps you are now prepared for this additional item of information. Iowa has more banks than any other state in the Union, and from the best available data more than one-half of its banking capital is held by farmers or those who have made fortunes on their farms. These banks hold over \$200,000,000 on deposit, and of this enormous amount 75 per cent is owned by farmers, active and retired.

When the first wheat was transported by rail from the Missouri River to the Atlantic Ocean, thence by ship to Liverpool, it cost 61 cents to thus market it. It was then weighed and loaded, then unloaded, put in elevators, weighed out, reloaded, reshipped again and again, and at great expense. It now costs 21½ cents to take a bushel of wheat from the Missouri River to Liverpool. Within thirty months, by reason of improved roadbeds, lighter grades, fewer curves, heavier iron and larger locomotives, a single engine will haul, not 170 tons as formerly, but 2,000 tons from the Missouri River to the Atlantic Ocean, where it will be unloaded from the car direct to ships, carrying not 2,000 tons as formerly, but 28,000 tons; and



H. S. GRIMES, SECOND VICE-PRESIDENT.

and the West was passed. There was no such line. While we of the East sometimes feel proud of the deeds of our ancestors, they were for a common heritage. We claim that in the East the latchstring always hangs out, but you have literally taken the door from the hinges."

J. C. Robb, an old Iowa man, but now of Kingfisher, Okla., responded for the Southwest. He reminded the Association that in parts of Oklahoma there are as yet no doors to have latchstrings—that men there still lived in tents. Nevertheless, no association of grain dealers was more alive than that of Oklahoma and Indian Territory—none has more solidity.

R. L. McKellar, president of the Memphis Merchants' Exchange, responded for the Southeast. While he deeply appreciated the welcome of Des Moines, the Southeast would like to meet the Association at closer range, and to that end he extended an invitation on behalf of the commercial organizations of Memphis to the Association to hold its next annual meeting in that city. "I want to tell how it is," he said. "A Tennessean was once describing to a Kentucky friend his country seat, and he went on to tell him of the clear, sparkling stream of water that ran across one corner of the farm, and of the stillhouse tucked away under a shady side hill, and a large and lush bed of mint that grew on the other shore, when he was interrupted by his Kentucky friend. 'Hold on there; you're describing Heaven.' Perhaps some of you may have heard of mint juleps," said Mr. Kellar. "Well, I

want to say to you that they are the product of the states of Kentucky and Tennessee, and that if you will come to Memphis next year, all who care to know more of that insidious drink will be accommodated."

J. L. McCall responded for Minneapolis and the Northwest. Having referred pointedly to the early trials of Iowa farmers as experienced with 10-cent corn and excessive railway rates, he continued in part as follows:

The past twenty years have witnessed many economic changes. Railroads have concluded that a reasonable compensation is in the end the most desirable. It is true this change of heart has in some cases been compulsory, but it has transpired. The grain dealers, once so few and execrated at every farmer's fireside, have multiplied; and as fast as they adopted business principles and common sense for their motto, they have prospered, until to-day we are gathered into a national organization assembled in the capital of the very state that three decades since witnessed privations most appalling, but which to-day boasts of fifty-cent corn, six-dollar cattle and seven-dollar hogs.

As the farmers have prospered the grain dealers have increased and I insist that each is essential to the other. The direct exchange between producer and consumer does not necessarily mean a profitable transaction for either; it means instead a narrow and unstable market. The grain dealer—and I speak now of the live, wideawake, up-to-date merchant—is as essential in his capacity of securing favorable outlets for produce as the manufacturer in his capacity of producing the implements with which the crops are tilled. But a justification of our existence is not demanded, nor is it necessary. Much more profitable is the con-



JAY A. KING, DIRECTOR.

sideration of the duties we owe the communities and ourselves.

In the first place we owe it to every community in which we operate to establish fair, honest market. Not meteoric, unstable prices born of an hallucination that everything is cheap and bound to advance ten cents per bushel; but rather a market based upon the very best prices obtainable at the moment in this or any other land, to be reached by reasonable rates, whether water or rail.

We owe it to ourselves: To establish arbitrations for the adjustment of differences no matter where arising; to establish a system of weights and grades through the United States at once fair and just to producer, merchant and consumer. Those features, together with the eradicating of unsound and dangerous so-called receivers and merchants who infest every city of importance. The calm and reasonable consideration of transportation rates are but few of the many matters deserving the attention of a national organization. But a national or district organization to prosper must be composed of substantial individuals, and of such I prefer to speak.

In responding for the great Northwest, I assert with all modesty and sincerity that the grain merchant is there in the very front rank of business men, and that he is a leader of all his brethren in the grain trade in the application of sound economic principles to his profession. The area is so vast, the volume of business so large, that any deviation from sound conservatism means speedy destruction. The purchasing and shipping of ten millions of grain by fifty, one hundred and one hundred and fifty agents located hundreds of miles from headquarters and selling the grain to the best possible advantage involves a responsibility too great for a mind tending to speculation or stupidity. The northwestern grain merchant who has succeeded—and there are many—will not impair his fortune or his credit by guessing at the future. High prices are more pleasant and decidedly more profitable to himself and to the farmers, but he sells as he buys, always alert and in touch with the best markets of the world.

Having shown how waste has been eliminated in the handling of grain by the perfection of system, and having dwelt on the bright future still in store for the wideawake dealer, and having sounded a warning to

those railroads which may be still inclined to consider the northwestern markets only as mere spots on the map to be avoided, he said:]

As grain dealers let us remember that we are not independent of other crafts or occupations, but a very strong factor among them all. We will maintain our prominent position if we never waver from these principles: Honesty, Fair Dealing, Live and Let Live. Let the other man make something; avoid confusion and controversy. Go to the bottom of every detail of every transaction, great or small. Look your man in the eye, say "Yes, sir," or "No, sir," and stick to it. And, above all, sell as we buy; let the other fellow take the long chances, and we take the carrying charges.

Mr. S. C. Woolson responded for Kansas City, and H. R. Whitmore of the Merchants' Exchange



D. HUNTER, DIRECTOR.



L. CORTELYOU, DIRECTOR.

for St. Louis, the latter closing his remarks by saying that St. Louis extended an invitation to the Association to meet in that city next year—1902.

S. S. Tanner of the Illinois delegation responded for Peoria, that "spiritual city." Mr. Tanner is both a wit and a humorist, and his address was characteristic. "I was born in Peoria," he said. "I was brought up within hearing of her church bells and in sight of her dew-oozing distilleries. If a wall were to be erected around Peoria like that erected around ancient Nineveh it would not be two weeks before the combined armies of the world would be battling for admission. Peoria distilleries turn out more of the stuff that revives the spirit of man than all other cities in the world combined. In foreign lands, perhaps, they do not know that Iowa produces more hogs and more corn than Illi-

nois, but they do know that Peoria is in Illinois. Every Hottentot in South Africa lisps the name of Peoria, and drinks to her memory morning, noon and night. We make peace with the heathen Filipino with our jug." He closed by reminding the cities that were in the field for next year's convention that "Des Moines has set an example—one that you cannot excel and one that you will do well to imitate."

This concluded the preliminary and formal amenities of the meeting; whereupon the Association settled down to the regular business of the session, which was begun by the reading of the annual address of President B. F. Lockwood as follows:

PRESIDENT'S ADDRESS.

Gentlemen of the Convention:—The old axiom, "All things come to him who waits," is as true of nations as individuals. Think, a little over a century ago this fair October day, the goodly land where we now stand was the possession of the Spanish kingdom, then in all her pompous glory, but through the mighty influence of Bonaparte was ceded to France just one hundred and one years ago this month; and so short a time past as in April of 1803—less than a hundred years—did this fair land come into our possession. If we allow ourselves to look back but one score more years than is allotted to man to live, we would find ourselves on alien soil, far from city, town, hamlet,



JAMES A. CARDEN, DIRECTOR.

home or civilization in its crudest form—not even the hunter's hut to be seen.

Only ninety-eight summers have passed since the red man was the sole monarch of these prairies, then covered with their beautiful native flora and grasses that the poets and painters have so devotedly striven to preserve for the present generations to enjoy; while herds of American buffalo and numberless smaller game covered the plains, and clouds of birds of various kinds filled the air to please and satisfy the moving bands of the former inhabitants of the land. But hark! in the early dawn of the nineteenth century, the unbroken prairies of the golden Middle West are resounding with the tread of the sturdy frontiersman whose daring deeds and untiring energy unlocked the storehouse of nature and from under the upturned sod shot forth the bounteous golden grain. So here's

"To the far-flung, fenceless prairie,
Where the quick cloud shadows trail;
To our neighbor's barn in the offing,
And the line of the glistening rail;

"To the plow in her league-long furrow,
With the gray lake gull behind—
To the weight of a half-year's winter,
And the warm, wet western wind."

Is it not reasonable for us to pause and consider at this time this wonderful transformation? In 1801, our Stars and Stripes, planted on the eastern shore of the Mississippi River, would have been on the extreme western borders of our nation. It was then President Jefferson congratulated the American people on "possessing a chosen country with room enough for our descendants to the hundredth and thousandth generation." To-day that flag has been moved westward 6,000 miles and but a little over four generations have passed, showing how inadequate is man's wisdom when applied to the Creator's plans. For, surely, events transpiring after 1801 have revealed the hand of the All Wise quite as distinctly as did prior historical acts, whereby, through influences and transactions brought about by wars between other nations, all

to our benefit, we became the possessors of this great western country. Many of our statesmen then, as now, unconscious of the drift of destiny, openly opposed expansion. Thankful we are that there were men then, and are men now, willing and dare to accept obligations and duties before them, knowing full well that they will soon prove rare opportunities and the most valuable eras of man's energies.

The geography of those days showed the land just west of Iowa as "Bad Lands." To-day the tax assessor makes a different showing, and his record stands good; while the map-maker has dropped the word "Bad" and the lands are now called the "Finest." Such changes as these upon our nation and land as viewed through so brief a period of time should cause us to seriously consider what part we have taken and should take that the nation may be better.

A man's business should be his pride; and being so, the line of his choice should be so valued that his pride and better judgment should impel him not only to emulate the most successful and prosperous in the trade, but to lend his influence and energy toward the advancement of that business in general, thereby helping others in the same line while helping himself. This is the true and fundamental principle of association work. But five years have passed since this Association was formed. The time, too, had come for the grain business to take on new methods and improved ways. Men saw the necessity; they believed it; and seeing and believing were to those men to do. A great undertaking or movement is sure to be talked of, and the more talked of the more the movement becomes an advancing influence and then a power, overcoming obstacles that would thwart any but a well-founded undertaking with a sincere, honest purpose. The originators were not schemers. They had

expansive, including interstate work, inter-commercial relations in all their various phases, arbitration and appeal boards, common carriers, laws, both state and national, terminal and central markets, trade rules and customs, grain inspection, car inspection, weighing, telegraph and telephone rights and customs, insurance, dissemination of information, crop and weather bureaus, and many other subjects of equal importance. The work is good and laudable; the scope wide and promising. The spirit of fraternal feeling within us individually and collectively commands us to occupy this field, to work zealously, and to strive until we shall win and command the esteem and attention of all with whom we may have business relations—the grain growers, the sellers, the buyer, the exporter, the miller, the common carriers and consumers—those not only within our own national borders, but the world over. The National Association, with its affiliated

business and receive such wide and beneficial results to our Association as through arbitration. The plan as it will be presented or adopted will be acceptable to all fair-minded and law-abiding members.

Trade rules and customs will be an interesting subject and will help to enlighten us in regard to some of the ambiguous rules and customs now in vogue, thereby lessening the liability to loss of not only money and time but of many a cordial business relation.

Terminal Markets.—The general caring for grain at the terminal markets in its various phases will, I trust, be thoroughly and fairly treated from both points of view—shipper and receiver.

Inspection.—More uniform rules and grading of grain in central markets is a much desired reform; and to that end we have invited the inspectors of the terminal markets to be present and to furnish us with type samples of their different kinds and grades of grain, and from these men we hope to gather much valuable information; and may this prove the beginning of a movement along the line of more uniform grading.

A crop bureau will at no distant day be a valuable department of our work, and photography, I predict, will become an important feature in that work.

Weighing.—We have accomplished much to improve weighing methods and facilities in some markets, and the work accomplished has proven so satisfactory that we have no doubt but that the results of the coming year will be equally as gratifying. There is no reason to doubt further the ability of this Association to accomplish a vast amount of good work. The time for questioning and doubting has passed when we compare the past membership with the present, and see especially the rapid growth made this year.

The policy of the officers for the past year has been to solidify the influence and unify the powers of all



J. W. M'CORD, DIRECTOR.

no dreams of dividends, combinations or selfish motives; so they labored zealously for hours, days and weeks, freely giving their time for the general good, not receiving any remuneration, being cheered by the solid growth of the Association.

This organization had its inception in this city and emanated from a want recognized by men of experience in state and local association work, who knew by past experience the necessity for an association that could control the power of state influence. This is one of the reasons for the interest the Cereal Club of Des Moines has taken in this convention. Members of that club feel that whatever is of their blood must show its breeding traits and make good all pedigree records.

It had its birth on November 9, 1896. The first meeting was held in Chicago a little less than five years ago. Its beginning was on a meager scale. The name was the larger part; and at that time might very appropriately have been likened to the small boy's pants that were much too large for him, whose mother remarked, "the boy would grow into them." So has the Association grown to its name, until the organization justifies the name to the fullest sense, as, I think, all of us present can testify. There were present at that meeting men who felt that there was need for such an organization, and their judgment was backed by their faith and zeal in their work since; for nearly every one of the men who joined at that time are still the organization's staunchest friends and workers, and are here to-day filled with determination to push onward in the future, being encouraged by the success of the past few years.

The new organization had to overcome all the prejudices that had arisen from former attempts along lines of association work which had failed, and the jealousies of some local and state associations which were opposed to a movement on so large a scale. All these difficulties are passed and instead a strong belief, influence and support have taken their place. All grain interests are fully aware of the necessity for an organization, strong, conservative, influential, with a national and international scope; its field wide and



J. P. HARRISON, DIRECTOR.



THOS. COSTELLO, DIRECTOR.

associations, has a power and influence for work that could not be accomplished by any other means. The membership has become powerful and far-reaching; for each member, whether regular or affiliated, has a voice and his personal influence is at once exercised in national and interstate affairs. To-day that influence is exercised by 2,000 or more members; and surely that is a powerful energy and must and will bring large results, as many of us who have been benefited by our Association can willingly testify.

With the aid of the National Association the state association work is thoroughly supported; and these various organizations are thereby banded together and their work cemented; they have a common head to go to for help and to work with for needed reform and advancement along lines helpful to their membership, and the grain interests in general, thus adding a double incentive to their work.

I have previously outlined some of the objects of our work, but I will call your attention to a few of them.

Arbitration.—This is one of the many important measures that we should put into active force at this session. It is necessary for all members, shippers and receivers alike. To my mind there is not a more important influence we can exercise upon the trade and

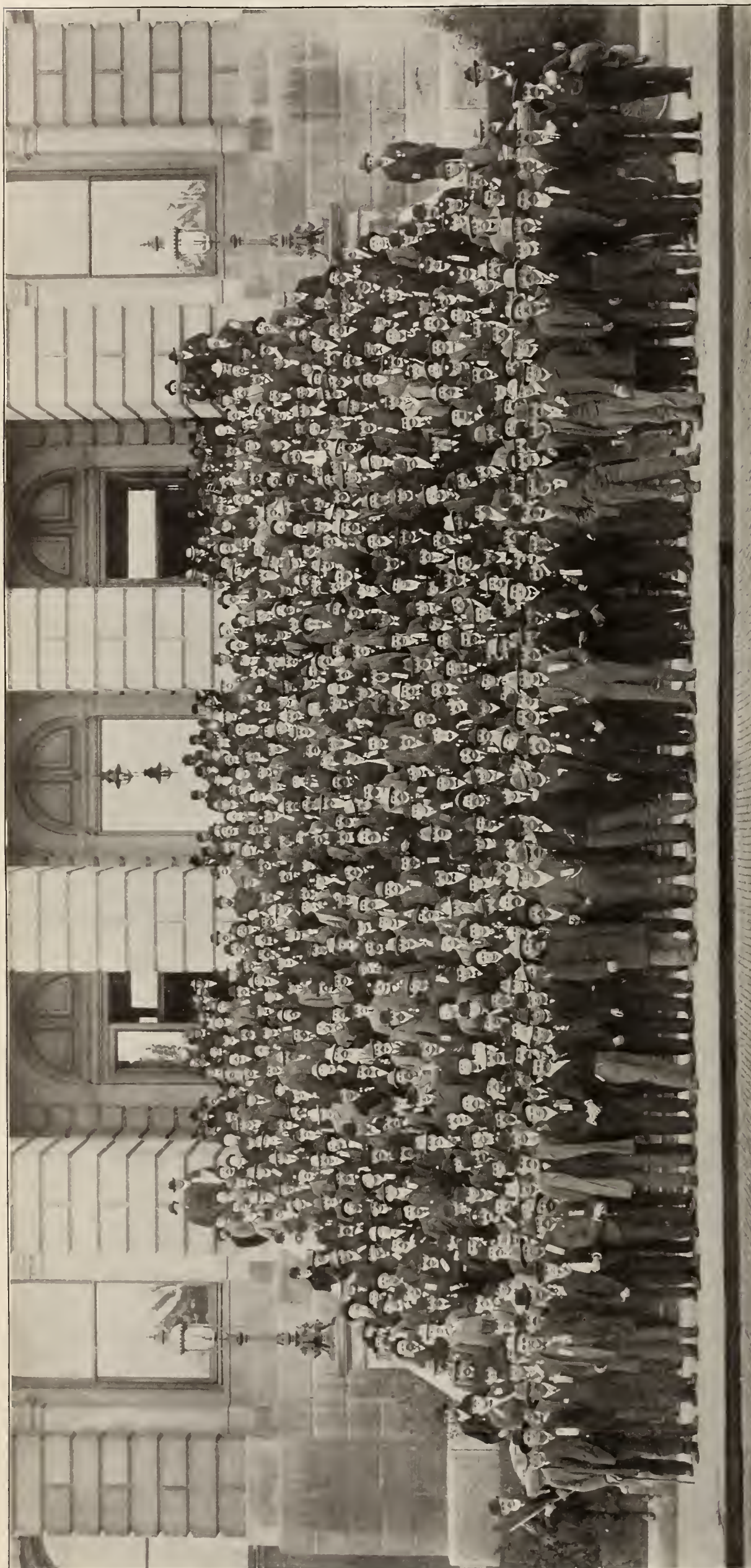


E. A. GRUBBS, DIRECTOR.

other associations, this being necessary to accomplish the great work for which the organization was designed. Therefore, they believed the necessity for their efforts to be greatest along the line of affiliation. With that accomplished, they would feel justified in taking up regular national work in an aggressive way with the assurance of success. The secretary's report will give the year's work in detail, and I am sure it will be interesting to you. The membership last year was about 475, this year it is nearly 2,000; the affiliated membership last year was 209, this year it is 1,645; the net gain being 1,525.

The treasurer's report will, I trust, be as gratifying to you as it is to your officers. Starting with a debt of \$316.43, and judging from the preceding year's revenue, we were not justified in increasing expenditures necessary to do the work. The secretary had received the meager sum of \$500 for his arduous work the previous year and could not safely depend on more. The other officers realized the necessity not only of economizing but of paying their own expenses, trusting to the future to be reimbursed. Under such circumstances they would not be so apt to attend to Association affairs as they would under more prosperous conditions. The closing of the year, however, finds us in a more favorable condition, and we feel sure the Association will justify and recommend a more liberal policy. To that end, allow me to urge the membership to a generous spirit toward the Association work for the coming year, avoiding irritating criticisms and undervaluing the strenuous work put upon the officers. Rather would I urge and solicit for them your individual help and encouragement, for the officers of the coming year will find their hands full, if they carry out the spirit and wishes of this convention and do the work which will surely confront them. But we question not, for men in the past willingly took up the obligations brought before them; so will chosen men now make grand use of this opportunity, the golden epoch of association work.

The secretary, C. S. Clark, then read his annual report. It said that during the year 20,000 circulars



GRAIN DEALERS' NATIONAL ASSOCIATION AS ASSEMBLED AT THE EAST FRONT OF THE IOWA STATE CAPITOL AT DES MOINES ON OCTOBER 2, 1901.

and 3,500 letters and postal cards had been mailed; that the Central Indiana Division had been organized; and that there are now twenty-two state and local grain dealers' associations. Continuing, the report says in part:

During the past year, your officers repeated the proposition regarding affiliation made to the state and local associations several times before and nine have voted to accept it. The proposition was that every member of each affiliated association shall become an affiliated member of the National for the nominal fee of \$1 per year, and regular membership in the National will be given only to track buyers, receivers and grain brokers who will through their regular membership in the National Association become honorary members of the state and local associations affiliated with it.

To those associations which consummated the affiliation some time ago, the National Association has turned over all individual members which it had in their territory previous to the federation; hence they as well as the National have gained numerically by the affiliation. It is the intention to turn over immediately to the associations late in consummating their affiliation the National's members in their territory.

Many association supporters cannot now be counted members because they have not paid their dues for the year. Were we to include them the federated organization would easily represent a membership of over 2,000 dealers. . . . [There are nine associations now outside the federation.]

The associations now affiliated with the National and the number of members they have paid for are as follows:

Texas Grain Dealers' Association, 143 members.
Grain Dealers' Association of Oklahoma and Indian Territories, 121 members.
Kansas Grain Dealers' Association, 338 members.
Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri, 104 members.
Iowa Grain Dealers' Association, 356 members.
Illinois Grain Dealers' Association, 235 members.
Ohio Grain Dealers' Association, 94 members.

The Southeast Iowa Association has not yet completed its affiliation with the National Association. It has voted to affiliate, but as yet has not reported the names of its members and paid the dues.

The divisions of the National Association, that is, local associations organized by it, and the number of members of each in good standing, are:

Western Ohio Division, 38 members; Western Indiana Division, 60 members; Central Indiana Division, 31 members; Northeastern Indiana Division, 20 members; Eastern Indiana Division, 50 members. This makes a total of 199 division members.

In addition to this we have 14 members in the territory of an association not affiliated with this organization and eight country shippers in unorganized territory, viz., three in Wisconsin, two in Michigan and three in Missouri.

The number of receivers, track buyers and grain brokers in good standing is 85; while 12 are in arrears to this Association. The number of this class of members will be materially increased as soon as the state and local associations transfer their members of this character to the National.

The treasurer's report, which had been previously audited and approved by the proper committee, was read as follows:

Receipts.

Nov. 19, 1900, balance on hand.....	\$ 183.57
Membership fees	561.00
Dues	1,568.95
Total	\$2,313.52

Expenditures.

Visitors' register, annual meeting....	\$ 2.25
Telegrams and telephone.....	11.03
Express charges .....	.81
Exchange on local checks.....	1.75
Office supplies	23.60
Expense securing rates fare and one-third	11.00
Expense of president.....	84.35
Stenographer's services	140.96
Bookkeeper compiling treasurer's report	2.50
Paper	24.58
Printing	58.19
Stamps and postal cards.....	123.50
Traveling expense of secretary.....	96.98
Badges for annual meeting.....	37.60
Amount voted secretary for services during 1900	500.00
Amount voted secretary for services during 1901	1,000.00

Total expenditures

\$2,119.10

Total receipts for year 1901.....

\$2,313.52

Total expenditures for year 1901.....

2,119.10

October 2, balance on hand.....

\$ 194.42

Balance due from members.....

\$1,176.78

The report of the committee on constitution and by-laws was then in order, but on motion of J. A. King of Iowa, the report was referred to a special committee and made the special order for Thursday morning, said committee being J. A. King of Iowa, L. Cortelyou of Kansas and F. J. Wright of Minnesota.

On motion of J. A. King of Iowa, ordered that all resolutions be referred without debate to the committee on resolutions. Said committee had been

announced to consist of E. S. Greenleaf, Jacksonville, Ill.; T. W. Swift, Battle Creek, Mich.; B. D. Williams, Highland, Kan.; O. Jay, St. Mary's, Ohio; R. S. McCague, Pittsburg, Pa.; I. P. Rumsey, Chicago; D. Hunter, Hamburg, Iowa; Jas. W. Sale, Bluffton, Ind., and M. E. DeWolf, Laurens, Iowa, most of whom were present to take part in framing a report, J. A. King of Iowa acting as chairman.

Adjourned to 8 o'clock p. m.

THE TROLLEY RIDE.

After dinner the management of the Des Moines street railways provided a number of cars to take the delegates on a trolley ride across the city. The cars left the Savery Hotel, proceeding westward several miles to Greenwood Park, where the band gave a brief concert, while the guests enjoyed the shade of the company's loop station adjoining the park. Resuming the cars the trip was made eastward, directly across the city to the Iowa capitol, and as the party stood upon the east steps of the building the photographer made the picture from which our engraving is produced. The governor in his private office welcomed personally all who called, while the library, senate and representatives' chambers and other public offices were thrown open for inspection.

WEDNESDAY EVENING SESSION.

The Wednesday evening session was opened by a paper by Geo. A. Stibbens of Red Oak, Iowa, on "The Proper Field of Work for the National Association." In view of the election of Mr. Stibbens to be secretary of the National Association this paper has especial interest, and is herewith given in full, as follows:

It gives me great pleasure to be permitted to address the largest grain meeting ever held. We have assembled in this audience, representative grain men from all the important grain-growing states, also from all the important boards of trade and exchanges of this country. This certainly means something, and demonstrates to the average man that the local shipper and the receiver have learned that it is to their mutual interest to work in harmony at all times.

Some of you, possibly, are not satisfied with the progress that has been made along association lines; but you forget that this work has all been started in the past six years, comparatively speaking. A little later it was learned by the association workers that there was a work that should be performed that could not be taken up by the state associations. The idea of the present National Association was conceived, and it was organized and struggled along for an existence, all of us believing it would die for want of proper support; but thanks to the persistence of its past officers, it lived until the trade was educated to the point of supporting it. To-night as we gaze around over this intelligent audience we are fully convinced that our fondest hopes have been realized.

The transportation companies regard the grain men as their friends, and they have provided a way for a great many of you to attend this convention; which is a convincing argument that they are interested in your welfare, and assisting you at every opportunity. The good people of Des Moines have spared nothing in the way of looking after your interests while here; and the success of this meeting is largely due to them and the present officers of the National Association.

I do not care to impose upon you by going over the past, as you are all interested in the future; and as I have been requested to talk about the "Proper Field of Work for the National Association," I shall devote my time to that subject.

The National Association should seek to effect general organization in the grain trade and endeavor to harmonize the different interests by pursuing a businesslike policy that will insure fair treatment to each individual, regardless of the fact whether he be country dealer, track buyer or receiver.

It should use its influence for state organization and assist the various states in work they cannot handle; but there have been a great many matters referred to the National that should never have gone to that body, but should have been worked out by the local and state associations.

The National should at all times assist the states and territories in their respective work, and see that the petitions of regular dealers against the scalpers and scoopers be respected in all markets of this country.

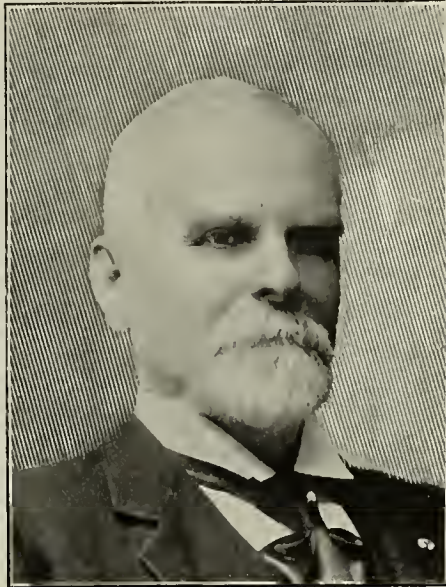
It should advocate uniform methods of handling grain at local points and inaugurate the custom of docking dirty grain; of taking written contracts; should stop the storing of grain and advancing money—all of which are detrimental to the country trade. But one dealer does it because his competitor does; consequently it spreads over the entire country. Such abuses as I have named can only be remedied by constantly keeping the matter before the country trade, as nearly all reforms are brought about by agitation and education.

The National Association should and has already established methods for adjusting differences between shippers and receivers, namely, by arbitration; and before this convention adjourns, I predict it will select an arbitration board composed of shippers and receivers that will satisfy all concerned.

In years of crop disaster like the present one, a

demand springs up in one state for a certain cereal raised in a sister state; and a member of one association must buy from a member of another in a border state. In so doing oftentimes disputes will arise that if not justly settled will cause more or less friction between different states and work injury to the cause of organization that should be sacredly protected and guarded. The remedy for these disputes is arbitration.

The shipper or receiver who is not willing to submit a difference to a board of arbitrators composed of fair-minded business men is usually dishonest, and does not desire to be fair. When you find such people, proclaim to the business world in bold type, giving their respective names and addresses, that these people are not willing to do as they would wish to be done by. The majority of the men in the grain trade are honest, and only a small minority dishonest. A way should be provided to force the dishonest element in the trade



CAPT. M. T. RUSSELL.
President Des Moines Cereal Club.

to be square or drive them out of the business. The honest majority should not be forced to bear the burden of sin forced upon the trade by the sealaws in the business. This organization is now strong enough to weed out and annihilate the dishonest pirates in the trade, as the local and state associations have driven the irregular dealers from their fields of action. I think I hear someone say that all this is impossible and can never be accomplished; but, gentlemen, I stand before you as a living witness to testify that



E. D. HAMLIN.
Secretary Des Moines Cereal Club.

six years ago the members of our little association in Southwestern Iowa and Northwestern Missouri told me that it was impossible to kill off the scalpers and create harmony among the dealers; yet it was done.

This organization has already brought about great reforms in central markets, and it will bring about a great many more by advocating improved methods in the future. Because certain customs have been long established in different terminal markets does not always bear out the argument they are right; and the market which has fallen into a rut must get out of it and adopt improved methods or lose its business. This body, backed up by the local and state associations, has been able to bring about a better system of weighing in several terminal markets which has effected a saving to the country shippers and the railroads. The railroads of this country in years gone by lost thousands of dollars on account of the loose system of weighing in vogue in different places; and I know they will render this Association all possible assistance in rooting out of existence all unjust and dishonest methods of weighing in all markets.

The National Association should bring all its in-

fluence to bear upon the matter of inspection and see to that inspection of grain in different markets is brought to a higher standard of perfection than is now in vogue in a great many markets. The inspection of grain when justly made must of necessity be done by a man who has had years of experience along that line; and the inspector of our grain should be a man who has gained his position on account of his knowledge of the cereal he inspects, not on account of his political pull. The inspection departments should be taken out of politics for all time to come and placed under the jurisdiction of the grain exchanges of this country. Then when an inspector proved to be incompetent he could be discharged without waiting for the term of the governor to expire.

It should be the business of this organization to keep a bureau of information on legal points of interest to the grain trade, so that it may keep the trade fully advised as to decisions that daily affect the business of some men; and by so doing it would render a service to the whole grain trade of inestimable value, which would have a tendency to shape measures for both state and national welfare.

The National should use its influence toward the improvement of crop reports and endeavor to educate the trade up to a point that perfect crop reports can only be obtained through improved methods and entirely free from private influences which are so common in this age and used expressly for the purpose of influencing the markets.

This body should provide all information possible to the state associations for the betterment of interstate business; create and maintain friendly relations between the shipper and receiver, and distribute a more general knowledge of commercial laws as actually applied to various states and localities to avoid loss and ill feeling. Commercial laws in different parts of this country in the grain trade are as varied as the four winds of heaven; and you will find it very essential, when shipping to a market you are unacquainted with, to learn beforehand some of its customs, as it will be very annoying to learn it by experience.

This organization should have no pet schemes or hobbies to perpetrate upon a confiding grain trade; but instead, should at all times strive to give the trade a clean, honest, businesslike administration, ever willing to advocate the right and make everlasting war on all evils existing in the grain trade; and this is the only kind of a National Association that will receive the united support of the entire country. Do not be deluded into the idea that a few people can maintain the ideal organization that you are all looking forward to, as it is absolutely necessary to have this country completely covered with state and local associations affiliated with this body, cemented together for one common purpose of eradicating the evils of the trade.

There should be no jealousy existing between the officials of the State and National Associations, as one is dependent upon the other for their success. It has been demonstrated what a combination of associations can do. Taking the city of St. Louis, for example, see what a little agitation has done for that market in the way of improved weighing facilities. Notice what this organization has already done for the city of Chicago. A little agitation in that market was the cause of an honest man placed at the head of the weighing department, and this same thing can be accomplished in all other markets of this country if you will continue to give the National your undivided support.

Men in terminal markets, placed in charge of the weighing and inspection departments, should be put there by the grain exchanges of this country to serve as long as they continue to be competent and honest, and should be held strictly accountable for the conduct of their official positions, and when found unworthy they should be treated the same as a dishonest individual working for a private individual. When a system of this kind is inaugurated throughout this country the cry of short weights and rotten inspection will cease to be heard, but not until then. The evils of the grain trade that have been fostered in certain markets and suffered to thrive off of the country trade are becoming fewer each year and will soon cease to exist if we give our loyal support to the National Association.

The matter of transportation had been discussed pro and con prior to the birth of grain associations and even down to the present time. There are but few dealers who agree on the question of transportation. I have been present at grain meetings where dealers aired their feelings toward the transportation companies of this country, and I must say their words were not flattering to the railroads, but this feeling is fast dying out. The grain trade is growing broader in its view of this matter. The railroads of this country have learned that these organizations have not been formed for the purpose of antagonizing their interests; but on the other hand, they find these associations desire to work in harmony with them, as a large portion of their revenue comes from the country dealers who gather this grain up in carload lots and maintain facilities for so doing. Then, I ask you, why should there be any fight between the grain trade and the railroads? Their interests are so closely allied that one of necessity must support the other; any disagreement will work equally to the disadvantage of both. Nearly all the railroads are recognizing these organizations and admit they are of great benefit. If you doubt this statement ask the officials of the Burlington system if the association in Southwestern Iowa is of any benefit to them, and they will relieve your minds by replying, "yes."

The transportation companies of this great country of ours are inclined to grant reasonable requests made by the different organizations, and as fast as they learn the usefulness of these associations, they will join hands with us to aid us to maintain the harmonious trade we are seeking. The most important thing the local dealers desire is uniform rates; and in our section of the country, that is just what we have. We cannot afford to have the word go out from this convention that this body is opposing the railroads; but on the other hand, we desire to have the impression go out that this body desires to be honest and reasonable

with all the transportation companies with whom we do business, and in making this statement, I believe I voice the sentiment of the entire trade.

The greatest boon this organization can give to the trade is to put into practical working "National Arbitration." Some will say that you cannot compel a man legally to arbitrate a difference, and we are free to admit this fact, but this board of arbitration can be established, and woe to the man or men who will not submit to it. It's the only reasonable way to settle a difference, and when you know beforehand that your case will be carefully considered by the best business men this country affords, the man who refuses to arbitrate is dishonest and his very act proves the assertion. When we find a man who refuses to arbitrate, furnish to the trade his name and address, and that will be warning enough to the public to let him severely alone. If a half-dozen obstinate men are disposed to place themselves in opposition to the will of the whole grain trade, we predict they will soon be looking up another kind of business.

We are living in a progressive age; the old ways of doing things must be cast into oblivion; therefore, it will be necessary for the National Association to be ever ready to grapple with all new propositions that will continually be coming to the front.

It will be impossible for the new officers of this body to please its entire membership, but each one of you should be willing for the majority to rule, and when they have outlined a policy to be pursued, you can rest assured the officers will have consulted the board of directors before undertaking to commit this body to any particular policy.

It should be the duty of every affiliated association to give this organization its very best support in order to build up and harmonize every element of the grain trade, and I predict that before another year rolls round, we will have a National Association that will be the pride of every grain dealer in this country.

It would be becoming to this convention to tender a vote of thanks to the railroad people who have kindly

we commend his great wisdom in announcing so promptly at a critical moment his determination to carry out the policy of the people as promulgated by his illustrious predecessor, thereby guaranteeing to the financial and commercial world the safe and conservative conduct of the affairs of the people, confirming the confidence which the people had placed in him.

G. L. Graham of St. Louis then read the report of the committee on credentials, as follows:

Your committee on credentials having investigated the standing of each of the affiliated associations, finds that the number of members paid up in the National Association, hence in good standing, and the number of delegates to which each association is entitled is as follows:

	Mem- bers.	Dele- gates.
Western Ohio Division.....	38	2
Ohio Grain Dealers' Association.....	96	5
Western Indiana Division.....	60	3
Eastern Indiana Division.....	50	3
Northeastern Indiana Division.....	20	1
Central Indiana Division.....	31	2
Illinois Grain Dealers' Association.....	371	19
Iowa Grain Dealers' Association.....	400	20
Grain Dealers' Union of S. W. Iowa and N. W. Missouri.....	104	6
Kansas Grain Dealers' Association.....	338	17
Grain Dealers' Association of Oklahoma and Indian Territories.....	121	7
Texas Grain Dealers' Association.....	143	8
Total	1,772	93

Each Association is entitled to one vote for each member in good standing.



WILLIAM N. ECKHARDT.

Chairman Chicago Board of Trade Delegation.

conveyed a large number of people free to this meeting, also to the city administration and to the Cereal Club of Des Moines for the magnificent manner in which they have entertained their guests.

The committee on resolutions then offered a partial report. Both the resolutions offered were, on motion of J. A. King, chairman of the committee, adopted. When the first resolution, lamenting the death of President McKinley, had been read, the orchestra played "America," the audience uniting in singing one stanza of the grand old national hymn. In like manner the "Star-Spangled Banner" was sung when the second resolution had been adopted. The resolutions were as follows:

Whereas, By the cruel act of an assassin—a fiend in the guise of a human being—our beloved President, William McKinley, was removed from us, his death being mourned by every true American and every lover of good government.

Resolved, By the Grain Dealers' National Association in convention assembled, delegates being present from twenty states of the Union, that the majesty of the law be invoked to better protect life and liberty against the lawless and traitorous methods of anarchists.

Resolved, further, That we recommend the enactment of such national and state legislation as shall suppress and banish from our domain all treasonable lawlessness and to prohibit for all time the landing upon our shores of that class who are traitorous in their instincts, lawless in character, and a menace to society.

Whereas, We deeply deplore the death of our beloved President, William McKinley, a man greatly loved by every people of the civilized world. Now, therefore,

While the world mourns the loss of this great American statesman, the nation is to be congratulated that the government of this great country continues uninterrupted.

Resolved, That in President Theodore Roosevelt the country has an able and worthy chief magistrate, and



I. P. RUMSEY.

One of the Deans of the Chicago Board of Trade.

On motion of H. S. Grimes of Ohio the report was adopted.

Geo. A. Wells, secretary of the Iowa Grain Dealers' Association, then read a paper on "Arbitration," as follows:

President McKinley in his last address at Buffalo gave expression to the following words:

"The age of exclusiveness is past. Commercial warfare is unprofitable. No nation can longer be indifferent to any other, and as we are brought more and more in touch with each other the less occasion is there for misunderstanding and the stronger the disposition, where we have differences, to adjust them in the court of arbitration, which is the noblest forum for the settlement of international disputes."

The whole civilized world have read these words of President McKinley's that so wisely suggest higher ideals of commercial methods and a higher standard of moral responsibility and justice in the commercial relations of nations; and I believe the same is also applicable to the commercial relations of corporations, firms and individuals.

No one can deny that there is a growing sentiment to-day in favor of united action in each separate line of business for the purpose of obtaining improved and economical methods. Concerted action, an exchange of ideas, getting the experience of others, broadens the mind of the individual, which results in an improvement of general business methods. No business man in a modern sense has a moral right to be exclusive in business to such an extent as to withhold himself and his business away from the friendly intercourse of his competitors. This is not a mere business proposition, but an element in the development of the great universal systems of to-day. There is too much friction in business, too much strife, too much greed, too much personal enmity, too much of that overpowering piratical policy. There is a higher standard to be obtained without eliminating competition.

The art of doing business should be the keynote to honest competition, and the man who excels in honest business methods should overcome his slovenly, dishonest or unfair competitors. The great obstacle in the way of obtaining this ideal condition in business to-day is the fact that all men are not honest and many lack an individual moral responsibility, to overcome which is a matter of education and custom rather than of force or coercion.

I will venture the assertion that at some future time the moral responsibility of the individual will be of such a high standard that arbitration will be the prevailing custom of deciding differences between corporations, firms and individuals, and in making this statement I concede the fact that arbitration cannot as yet be enforced with corporations, firms and individuals unless they be members of some organization whose constitution and by-laws provide for arbitration and to whom such corporations, firms and individuals are either directly or indirectly obligated.

Custom does establish law as stringent as the statutes, and a trade organization may establish custom. There is no line of business in which such immense amounts of money are involved in its transactions and in which its transactions are so quickly consummated as in the grain business. Go, if you will, to the floor of any one of the great grain exchanges of the country and observe the trading that is done without written agreements, but simply by word of mouth. Do you ever hear of any default of those verbal contracts?

I think that I could find at least a half dozen farmers, and I believe two or three country grain dealers who are members of the Iowa Grain Dealers' Association, who, if they would go on the floor of one of the grain exchanges to do business, there would develop a nice, rich, rosy case of defaulted contracts in less than fifteen minutes after arrival, if the market should advance.

The Iowa Grain Dealers' Association is anxious at all times to establish friendly relations with bidders



J. W. RADFORD.

One of the Delegates from Illinois Association.

and receivers and also to merit their coöperation. We believe that dealers at terminal markets have a right to expect fair treatment by shippers; that contracts should be completed, and overdrafts settled in an honorable manner. We also believe that dealers at terminal markets should be fair in their dealings with the country shipper. There are other matters of difference that occur between these two classes of dealers, such as ambiguous telegrams and technical differences regarding terms, etc.

The courts of law are cumbersome and expensive, and where a difference is for a small amount it is hardly worth while to be at the expense of going to the courts and spending the amount involved with the only result of making an enemy of your contestant. The word arbitration is significant of justice and equity, peace and harmony, and it appeals to the highest order of individual moral responsibility. The person who offers to settle a difference by arbitration makes an unqualified concession to the rights of others and solicits of his opponent his friendship and good will. The person who refuses to arbitrate a difference indicates a disposition to be arbitrary, unfair and unreasonable and is not worthy of the confidence and good will of the members of the Association.

The arbitration committee should be composed of men who hold in high esteem all principles of moral rights and justice, and their decisions should also have regard to the plain rule of contracts. Three experienced grain men are certainly more competent for deciding a difference and knowing the customs of the trade, than a jury of twelve men, not one of whom, perhaps, has any practical knowledge of the business.

W. H. Chambers read the report of the committee on arbitration, who had been instructed to prepare a code of rules for the use of the arbitration committee of the National Association. He explained the difficulties in the way of preparing the report in order to make it clear and concise and free from burdensome technicalities. It is a new step in as-

sociation work, and the elements of the trade affected are as yet quite varied and in part unorganized; nevertheless, the committee have approached their task and have presented a report, hopeful that it will lead to permanent and useful results. The committee did not move the adoption of the report, but left it in the hands of the delegates, mindful that the only effect that can be given to the plan proposed is that which shall come out of the voluntary concessions of members of the trade interested. The report is as follows:

1. (A) The committee on arbitration shall consist of three members. Its decisions shall be final, excepting only as herein provided, and its jurisdiction shall cover all matters—national, interstate and inter-local—pertaining to the grain business wherein any member of the National Association or affiliated association has personal interest, and it shall be an appeal body for the review of decisions referred to it from any arbitration committee of an affiliated association. It shall conduct all cases that may come before it in conformity with the rules prescribed therefor. The method of adjusting matters before it shall be such as will best secure justice and equity impartially to all interested parties, with the object in view of making this a means of settlement in matters connected with the grain trade, to restrict friction, avoid litigation, prevent misunderstandings and adjust improper conditions.

1. (B) ARBITRATION COMMITTEE IN EACH AFFILIATED ASSOCIATION.

Any affiliated association may create an arbitration committee and adopt such rules and regulations as may be deemed expedient to define the duties and conduct of such committee not in contact with the duties or jurisdiction of, or the rules governing, the arbitration committee of the National Association.

The function of such committee shall be, whenever possible, to act as a court of first resort in all matters within its jurisdiction, and its decisions may be appealed from to the National Committee when within the jurisdiction thereof.

(2) (A) HOW FORMED.

The National Committee shall be composed of three members, appointed by the president and approved by the board of directors, to be selected as follows: One prominent receiver or buyer of grain, located at some central or terminal market; one representative country shipper and one not entirely identified with either of above divisions of the grain trade, all to be selected on the consideration of geographical and business conditions as near as possible to equalize the committee. When consistent this last selection should be made chairman.

All appointments shall be from the membership of the National and its affiliated associations.

2 (B) COMMITTEE OF AFFILIATED ASSOCIATION.

Shall be formed as designated in the rules and regulations of such association, composed of members of the same and doing business within its territory.

3 (A) JURISDICTION.

National Committee shall have jurisdiction in cases:

- (1) Between members of the National Association.
- (2) Between members of the National Association and non-members, by consent of the member.
- (3) Between members of the National and members of any affiliated association.
- (4) Between affiliated associations and between affiliated associations and organized boards of trade or commerce.
- (5) Cases appealed from the decision of any committee of an affiliated association, when same is in conformity to the rules governing such appeal.
- (6) Between non-members, when by the consent of the committee to act, and payment of all expenses by such contestants.

Affiliated Associations. Committee shall have jurisdiction in cases:

1. Between its members.
2. Between its members and a non-member, by consent of the member.
3. Between its members and members of the National.
4. Its jurisdiction shall only cover cases arising in territory covered by its organization.

IV. APPEAL, NATIONAL COMMITTEE.

1. When either party to a case desires to appeal from the decision of the affiliated association committee he shall so notify the secretary of the affiliated association in writing, within five days after the notice to him of the decision of the committee, such appeal to conform to the jurisdiction of and rules governing the National Committee.

2. Such appellant shall deposit with the secretary of the affiliated association such amounts as are specified in rule No. 1 heretofore, the same to be forwarded to the National secretary with the papers in the case.

If the decision is for the appellant there shall be included in the findings of such verdict such amounts as are specified in rule No. 1, covering filing of original cases.

On settlement by the appellee of the judgment against him there shall be refunded to the appellant all original deposits made by him.

3. A fee of \$5.00 shall be paid by the appellant to the secretary of the affiliated association to cover expenses of transcript.

4. Failure to comply with the provisions of this article shall constitute a forfeiture of the right of appeal.

5. When the party desiring to appeal has complied with the requirements heretofore specified in this article, the secretary of the affiliated association shall then notify the appellee and forward to the secretary of the National Association within thirty days thereafter a complete transcript of the case.

6. The decisions of the committee shall be final, except on request of both contestants the case may be revived by the board of directors and affirmed or remanded back for retrial.

AFFILIATED COMMITTEE.

When between members action shall be governed by laws of such Association.

When between members and a non-member, appeal by either contestants to the National committee.

When between member and member of National, appeal by either contestant.

V. COMPLAINTS—WHERE TO BE FILED.

1. In cases desired to be arbitrated the complaint shall be filed unless otherwise provided.

When between members of different affiliated associations, with the secretary of the association of which the complainant is a member, provided in such case,



W. T. HAARSTICK.
President St. Louis Merchants' Exchange.



THOS. K. MARTIN.
Chairman of the St. Louis Delegation.

on request of either contestant, the complaint may be filed with the secretary of the National Association.

When between members of an affiliated association, or between a member of an affiliated association and a non-member of any association, or between a member of an affiliated association and a member of the National Association, with the secretary of the affiliated association.

When between members of the National Association, with the secretary of that Association, and when between a member of the National Association or of any affiliated association and board of trade or exchange, or any of its officers as such, with the National Association.

2. On all cases arising between members of either the National or affiliated association, shall be filed with the affiliated committee, unless due cause can be shown or prejudice may exist, when, by the consent of the secretary of the National, they may be filed with the National committee.

Cases between members of an affiliated association and non-members shall be filed with its committee, unless

such committee recommends, and the National secretary consents to the filing of the same with the National.

3. All cases to be filed with the National committee shall be governed by the rules of jurisdiction as above.

VI. RULES GOVERNING THE NATIONAL COMMITTEE.

1. All cases coming under the jurisdiction of the committee shall be filed in writing with the secretary of the Association, together with all data, and evidence properly sworn to, with pleadings attached, accompanied by a deposit of \$10, if filed by a member of either the National or any affiliated association; if by a non-member, \$15; or, if in a case between two affiliated associations, or between an affiliated association and a board of trade or commerce, \$20, proper receipt for which shall be given.

2. Notice of complaint, with copy of all papers filed, shall be given within five days to the defendant named in the case, who must accept service within five days after the date of mailing such notice. If service is not accepted within five days, plaintiff shall be notified, and due record of such refusal or neglect on the part of the defendant shall be made, all papers returned to the plaintiff with 75 per cent of deposit made, 25 per cent of such deposit being retained and converted to the treasury, to cover expenses of notification.

3. Proper service shall be considered to have been made on having mailed to the last known address, by registered letter, notice of the same.

Acceptance of service must be by same process, only at the risk of the sender it may be mailed without registry to the secretary.

4. If service is accepted by the defendant he, they or it shall have ten days from date of such acceptance to file in writing, with the secretary, any counter claim or answer, attaching all data and evidence properly sworn to, with pleadings attached, together with deposit, as per rule No. 1. Time for filing papers may be extended by the secretary.

5. After such acceptance of service, failure to file papers as stipulated in rule No. 4 shall accrue as a default to plaintiff.

6. On filing of papers and deposit by defendant, notice of same, together with copy of all papers filed, shall be made to the plaintiff. Rebuttal evidence may be filed by the plaintiff within five days.

7. The decision of the committee shall be furnished in writing, by the secretary, to both parties, within five days after ruling is made, and a compliance with such ruling shall be made by the parties to the case within ten days.

8. A refund of the deposit shall be made to the party in whose favor the decision was made; the deposit of the defeated party shall be converted into the treasury, to cover expenses of committee.

9. Before any case may be submitted to the committee, each party to the case must file with the secretary, in writing, his agreement to abide by the decision of the committee, and release all members of such committee from any responsibility for errors in judgment in any respect whatsoever, or for any damage, or any loss suffered by reason of their acts.

10. It shall be the duty of the committee to hear, pass upon and determine all cases submitted to it by the secretary coming within its jurisdiction, and to render a just and equitable verdict thereon, according to the evidence, and to the best of their ability.

11. The committee may elect as to the manner of passing upon such cases as may be submitted, as follows:

(a) Papers may be passed to each member by mail, the second member passing to chairman of committee, each attaching thereto, in writing, his verdict, and if a decision signed by a majority of the committee is attached, returning same to secretary, with such verdict in writing, properly signed, or

(b) Passing on same at a meeting of the committee, submitting a written decision to the secretary, signed by a majority of the committee.

(c) Or, if no verdict can be reached, a return of all papers with a signed statement to that effect, in which case the secretary shall return all papers, deposits and pleadings to the proper parties in the case.

12. The committee cannot be called together to exceed once each calendar month, unless by consent of each member of the committee.

13. The committee cannot act at a meeting thereof unless all members are present.

14. If the parties to a case submitted for arbitration desire to present the matter to the committee in person or by an attorney, they may do so by paying whatever amount, in addition to the amount provided for in Section 1 to be paid, shall be necessary to cover the additional expense of the committee, if any, of such personal hearing. The amount of such additional cost to be determined by the committee. All evidence presented to the committee in person shall be given under oath, when so required by the committee. Only members in good standing may act as an attorney before this committee.

15. When a case is referred to the committee on arbitration they shall fix a time and place for its hearing, if to be considered as per Rule 11 b, and notify the secretary of the date and place so fixed, which shall be sufficient time in advance to permit the secretary to give the parties five days' notice of the date and place of trial. The parties shall present all written evidence to the secretary on or before the date fixed for hearing, and neither party shall postpone the hearing of a case longer than ten days after it has been submitted unless good cause can be shown therefor, satisfactory to the committee.

16. The members of the committee on arbitration shall receive for their services \$3.00 per diem for the time used in considering and deciding the cases submitted to them; also the amount of their actual traveling expenses and hotel bills.

17. The money received by the secretary to defray the expenses of arbitration shall be by him placed with the funds of the Association and the expenses therefor paid by him out of the general fund, but he shall keep

a separate account of such receipts and expenditures.

18. Neglect or refusal to submit a case in controversy to the committee on arbitration, or to comply with the award of the committee, shall be deemed unbusinesslike conduct, and the penalty therefor may be a fine, suspension or expulsion, as the board of directors may decide.

19. In case of absence, or disqualification of regular members of the committee, the president shall fill the vacancies with any member eligible, willing to serve. A majority award or finding of any such committee shall be binding and any award or finding of the committee thus formed shall be made under the same rules and shall have the same effect as if made by the regular arbitration committee.

20. There shall be published each month, or semi-monthly, if necessary, a bulletin, giving details as hereinafter set out of all cases filed for arbitration, passed upon, decisions rendered and any other information bearing on the matter of arbitration which may interest members. A copy of such bulletin shall be mailed to each regular member, the secretary and chairman of arbitration committee of each affiliated association, and such other parties as deemed proper. Such bulletin shall set forth:

(a) Names of plaintiff and defendant, nature of and amount of all claims filed.

(b) Decisions of committee, naming case, plaintiff and defendant, nature of, amount, verdict and other information of interest to members.

(c) Notice of settlements, giving case, plaintiff, defendant, nature of and amount.

(d) Notice of failures to comply with decisions of committee, naming case, plaintiff, defendant, nature of and amount.

(e) Notice of refusals to accept offers of arbitration, naming case, plaintiff, defendant, nature of and amount.

If good and sufficient reasons are offered by defendant the same shall be published.

(f) Notice of all members fined, suspended or expelled by the board of directors.



W. H. CHAMBERS.

Chairman of Committee to Prepare Arbitration Rules.

On motion of Mr. Tanner of Illinois the report was ordered printed for the instruction of the delegates and made the special order of business for Thursday evening.

On motion of H. S. Grimes of Ohio a committee on nominations was ordered, the committee to consist of one member from each affiliated association and four members at large. The chair appointed the following: H. S. Grimes, Ohio, chairman; Iowa Grain Dealers' Association, E. L. Bowen, Des Moines; Southwestern Iowa and Northwestern Missouri Grain Dealers' Union, W. F. Johnston, Fontanelle; Kansas Grain Dealers' Association, L. Cortelyou, Muncotah; Texas Grain Dealers' Association, J. P. Harrison, Sherman; Oklahoma and Indian Territories Grain Dealers' Association, C. T. Prouty, Kingfisher, Okla.; Illinois Grain Dealers' Association, H. C. Mowry, Forsyth; Western Ohio Division National Association, J. H. Conger, Eaton, Ohio; Western Indiana Division National Association, W. T. McCray, Kentland, Ind.; Eastern Indiana Division National Association, J. L. Schalk, Anderson; Northeastern Indiana Division National Association, H. L. Combs, South Whitley; Central Indiana Division National Association, I. A. Adams, Bunker Hill; at large, H. H. Peters, Chicago; Chas. England, Baltimore, Md.; G. L. Graham, St. Louis, Mo.; John O. Foering, Philadelphia, Pa.

The meeting then adjourned to meet Thursday, 9 a. m.

THURSDAY MORNING SESSION.

The session of Thursday morning, October 3, was opened about 10 o'clock with songs by the colored glee club of the St. Louis delegation. The

delegates were slow in assembling, but about 10 o'clock the chairman demanded order, and having obtained quiet, introduced Mr. F. H. Peavey of Minneapolis—a "typical grain dealer," who has grown up in the trade, passing through all its phases to the position of the greatest grain merchant in the world. Mr. Peavey read the paper published in another place in this paper, entitled "A Historical Sketch of the Grain Trade of the Northwest."

Papers were read at this time by J. P. Harrison, president of the Texas Grain Dealers' Association, on "The Grain Trade's New Century Brotherhood;" by Warren T. McCray of Kentland, Ind., ex-president of the National Association, on "The Grain Merchants' Conquered Difficulties," and by H. S. Grimes of Portsmouth, Ohio, on "Better Government Crop Reports." Owing to the extreme length of these proceedings, these papers—the first two of which were more or less academic in character and the last treating a subject which has already been made more or less familiar to readers of the "American Elevator and Grain Trade" by Mr. Grimes's previous presentations of his plan for improving the character and enlarging the value of the gov-



GEO. A. WELLS.

Author of Paper on Arbitration.

ernment's reports—are held over for a subsequent issue.

W. R. Breckenridge of Illinois, in behalf of H. H. Peters of Illinois, chairman, presented a verbal report from the committee on new membership. The committee were not entirely certain of their duties, but at least there had been no rush to them of persons desiring memberships in the Association. The committee would, therefore, suggest in lieu of a formal report, that every present member constitute himself a committee of one to work up a "revival," so to speak, in his neighborhood, until every dealer in the country shall have become a member of one of the affiliated associations and through it enter this Association. The committee further drew attention to the fact that the grain exchanges of the country were not properly represented by memberships in this Association. Milwaukee has only two members; Kansas City has none; Buffalo has none, while Baltimore, St. Louis and Philadelphia have less than ten each. The members of all the exchanges should belong to this Association, and at the maximum cost, \$10, can of course afford to do so.

L. Cortelyou, president of the Kansas Grain Dealers' Association, read a paper on "Weighing Grain in the Country and at Terminal Elevators." As the paper was in line with Mr. Foss's remarks, and was corroborative of the latter's general statement of principles, it may be beneficial to the in-

terests of the country dealers, who are themselves rank offenders, to refer to this subject again. We shall therefore use Mr. Cortelyou's excellent paper for that purpose.

At the close of Mr. Cortelyou's reading, the meeting adjourned for dinner.

THURSDAY AFTERNOON SESSION.

After music by the St. Louis singers, the afternoon session was opened about 2 o'clock by J. W. Snyder of Baltimore with a poem entitled:

AN "OWED" TO AN OLD GRAIN CAR.

We owe you much, oh, old freight car,
Of twenty thousand weight!
You were a daisy in your day,
As grain men can relate;
And paid us well for handling you,
Though minus a "cut rate."

Three cents commission on your wheat;
Two and one-half on corn;
And, then, the "pickings" of your time
No one could treat with scorn.
The weigher also got a slice,
His mournful cry no more
Will wake the "tally-keeper" up
A calling out the "score."
And if the drays met with delays,
Nobody cared a rap;
The weigher simply took a smoke,
The "tally" took a nap.
While waiting thus, it was quite common
To patronize the apple-woman,
In social science quite astute;
She gossiped, while they bought her fruit.



C. A. BURKS.

Chairman of Committee on Trade Rules.

So gently passed the time away;
Nobody seemed to bother;
And if ten days were not enough
To lift your mighty load of stuff,
They simply took another.
"Car service agent" there was none;
"Demurrage" was unborn;
There was no need to hurry back,
And you might lie upon the track
Till sprouted was your corn;
And there contentedly you stood,
So quiet, patient, meek and good.

These restings must have made you stronger,
For you were fit for service longer
Than your successors, who of late,
Are your size multiplied by eight,
And carry forty tons, we know;
But to the "scrap pile" soon they go;
Their "strenuous" lives are quickly ended,
There is no time to have them mended.

If rickety you should become,
And needed too much fixing,
The rural shipper took you in
For "storage" or for "mixing."
Perchance, when time had worn you out
And left you in the lurch,
They might use you in the country for
A chicken coop or church.

And here I leave you, dear old car,
Your memory is green,
We mourn the "shekels" that you bore
To grain men in the days of yore.
But now, are rarely seen.

The chair then introduced H. A. Foss, Board of Trade weighmaster at Chicago, who said it had been intimated to him that the subject of "Coopering of Cars and Scale Inspection" had become stale; but, in fact, the subject can never be out of date so long as grain cars sprinkle grain all the way from Minneapolis to New Orleans or from Western Kansas to Boston. To show how the grain car does

so sprinkle grain and how scales should be corrected, Mr. Foss brought to his assistance the camera; and, as he announced to the audience at the close of his reading, he had combined the results of his own personal experience as a weighmaster with the graphic touch of the camera and had produced the pamphlet which he had just read, embodying the "suggestions" which we print in full on another page, and which are illustrated in the pamphlet by half-tone pictures of bad cars and scale settings and housings. This pamphlet of some fifty pages is printed in the most elegant manner, on coated paper, while the pictures are the very perfection of the photo-engravers' art. This book Mr. Foss has published at his own personal cost, and he distributed them to those in attendance at the meeting, nearly 1,700 copies having been given out by him and assistants within a few hours after the reading.

The chairman complimented Mr. Foss on the value and beauty of the book, and expressed his gratification that there was at least one official so much interested in the shipper as to do all this for his benefit, spontaneously and without expectation of reward of any sort. Think of the labor expended on this little book! Think of the cost—not less than 35 cents each; and all is given away by Mr. Foss, who has no direct pecuniary interest in the matter! Surely the latchstring of every shipper's home should hang out in ready welcome for him.

J. D. Shanahan, chief grain inspector of Buffalo, read the following paper on "Uniform Inspection Rules for Grain:"

It affords me great pleasure to be present at this annual meeting of the Grain Dealers' National Association; and I take the opportunity to thank you for your very kind invitation and many courtesies shown me. This meeting will be of great value to me from an educational standpoint, and I hope it will redound to our mutual benefit.

Your esteemed secretary has asked me to say a few words on the subject of "Uniform Inspection" rules; and I will endeavor to give you some of my thoughts and observations along that line. That I have been asked to speak on this subject naturally presupposes the fact that the inspection rules of the different markets of the country, as compared with one another, are not uniform, and consequently unsatisfactory and confusing. Granting that this is true, the question naturally arises, Why are inspection rules not uniform?

One glance at a map of this great, broad country of ours will suffice to answer that question, if one stops to consider the great variety of climate and soil found there, on which is raised countless kinds and varieties of grain, harvested and marketed under all circumstances and conditions—where the grain of each state and county, and of even some large farms, has its peculiar earmarks that enable the expert to distinguish it from that of the surrounding country.

This in itself makes the question of uniform inspection a many-sided one; and I do not believe that it will be made universally satisfactory as long as we must depend on human judgment to make it so. Again, each individually established market has its own peculiar needs and requirements, growing out of the amount and varieties of grain handled by it, its connection with other markets, its peculiar business methods; and I have a notion that the personnel of the different markets is to a more or less degree reflected in the grading one gets from them.

In the smaller markets, where grain is drawn from nearby points, and in seasons when grain is poor or has gotten wet, or for any other reason they have not been so fortunate in the harvest as their neighbors, farmers and shippers from these markets are prone to select their standards from the best grain found in their section, and expect the balance of the grain universe to make them grades to fit, and are often much disappointed when their grain does not make top grades in the general market. Failing to get their grain graded in the general market, as they think it deserves, they institute an inspection of their own and grade their grain to suit themselves.

Again, the purely export markets are very liberal in their grading, and that is at times embarrassing to inland markets, which have a domestic rather than a foreign trade to satisfy; for the shipper will naturally send his grain to the market that gives him the best grading, providing the prices are in line, and sometimes where they are not; thus giving the export market an unfair advantage over the inland market drawing from the same territory. This naturally has a tendency to bear down on the grading of the inland markets in order to insure them a fair share of business.

These are some of the reasons why inspection in the different parts of the country is not uniform; and in the absence of any universally recognized standards, who can say which is right and which is wrong? The present methods, however, present a condition that is not healthy or desirable to the trade. It is my belief that this can be overcome in a measure by the co-operation of the different exchanges and inspection departments in getting together and agreeing on a uniform set of rules and standards.

I believe that an authority could be constituted by representatives of these different bodies to set the standards of the different grades, and it should be the duty of each inspector to see that these standards

are kept inviolate. Yet in the face of experience there can be but little hope that such a scheme could be brought into successful operation; for during the movement of last year's crop we find in one of our greatest wheat-producing states two large markets in controversy over the standards of their respective grades. The inspection in this state is by authority of the state government under one head and amenable to the same rules. It was ruled, I believe, that the one market could not revise the grading of the other. This, of course, is right on principle. But why two different



JOHN O. FOERING.

President of Chief Grain Inspectors' National Association.

standards in the same inspection department? If we cannot get uniform grading from one state alone, what can we expect from the whole country? I also understand that the state authorities ruled that the inspection of grain is not an exact science, and I do not think anyone will dispute the decision. But the art is



J. D. SHANAHAN.

Secretary of Chief Grain Inspectors' National Association.

one that requires a thorough and technical knowledge of grain in all its various qualities and conditions, and of the influences of the climate and seasons upon it and also a knowledge of its enemies, from man down. To me it has all the fundamental principles and elements of a science worthy to be placed in the same category with geology, botany and kindred sciences; but as yet nothing has been done systematically to develop it.

Again, we find in the greatest grain market of the world an inspection under authority of the state government which is supposed to be and should be the model inspection of the world; and yet the trade finds it necessary to support a small army of private in-

spectors to check the work of this department. I mention these matters to show what a difficult proposition we have on hand in a movement for a universally uniform grading of grain; and also to show the need of it.

Suppose, then, for the sake of argument and from a universal standpoint, that we have tried the various methods of inspection under the different authorities and find them wanting. Why not in the emergency turn then to the national government and see if she cannot help in the matter. The Agricultural Department has taken up farming, cattle raising and hundreds of other industries and helped to reduce them to scientific principles, and I believe she could be of great help in the grading and marketing of our grain, and I believe if the United States government would do no more than establish standards for all the needed grading, merely as a reference, it would be a strong moral support for all honest markets and inspectors, and exert a strong influence toward a uniform grading. These standards could be made up every year by representatives of the different markets of the country in conference with representatives of the government.

This idea could be carried further if thought advisable, and the government could license the inspectors in different parts of the country to use these standards and issue United States standard certificates, leaving the use of such certificates optional with each market, and making the penalty for improper use of such standard certificates a revocation of license.

I believe something of this kind will have to be done before we can hope to get a universally uniform and satisfactory grading of grain. A great deal has been said about the inspection rules not being uniform, but if you will compare a set of them from the various markets I think you will be struck by their similarity rather than their difference. The greatest trouble comes from the different constructions and interpretations put upon them by different inspectors; and, again, many of the rules have been dropped from use and have become obsolete, and you will find many inconsistencies in them that should be eliminated. I believe it would be a benefit in itself if this could be done on a universally uniform basis.

Among the guests of the Association was C. S. Schofield, of the Agricultural Department at Washington, who was in the West and came to Des Moines to meet the chief inspectors. He was introduced at this point by Chairman Lockwood, and said that as his work was the investigation of varieties and grades of wheat he had been greatly benefited by his interviews with the inspectors, more particularly as a part of his field of study was the investigation of the losses and deterioration of wheat in transit. He had learned much of what growers, dealers and consumers need, and is better able now to tell the farmers what varieties to grow.

J. R. Sage, director of the Iowa Weather and Crop Service, read a learned paper on the "Compilation of Statistics." As this paper is in line with the thought suggested by Mr. Grimes of Ohio in his paper, we shall defer its publication until the latter also appears. Preliminary to his paper, Mr. Sage gave the meeting the benefit of an advance "crop report" on corn in Iowa. During the previous ten days special reports had been received and tabulated, and these showed an apparent average corn production of 26 bushels per acre, or 225,570,000 bushels for the state. This is 35,000,000 bushels short of the 12-year average and 100,000,000 bushels short of the state yield of 1892. He thought the final returns would bear out this estimate. This puts the condition at 12 points ahead of the August condition and indicates a two-thirds crop.

The chair then permitted as a courtesy to visitors addresses in behalf of the cities seeking the honor of entertaining the Association at next year's meeting. H. R. Whitmore spoke for St. Louis; R. L. Kellar for Memphis, and C. C. Rogers for Milwaukee.

J. A. King of Iowa offered a report of the committee on revision of the constitution and by-laws, but before the reading began, the question of location for next year's meeting became pressing. It is provided by the fundamental law of the Association that the place and time for the annual and special meetings shall be fixed by the board of directors, so that any effort to name a place at this time was clearly out of order. Nevertheless, the Illinois delegation, by Mr. Tanner, asked whether the directory would be guided by a vote of the Association. President Lockwood replied by saying that the directors had been guided so far only by their judgment of the best interests of the Association—the place of meeting being selected solely with a view to the location's effect on the Association's subsequent membership and influence.

Mr. King insisted on the regular order and the ruling being in his favor, Mr. Tanner yielded the floor, and Mr. King continued the reading of his

report. This document pointed out the changes that had been made in the fundamental law by the board of directors, who are empowered to independently make any changes in the constitution and by-laws deemed by them necessary. These changes were in line with the newer scope of the Association and the modifications made necessary by its enlarged affiliated membership. The reading being concluded—

Mr. Tanner of Illinois moved to substitute for Sec. 1 of Art. 1 of by-laws a section providing that the place of meeting shall be designated by the Association in open meeting.

A delegate from Texas moved to table Mr. Tanner's proposition. On viva voce vote, the noes were declared to have it.

Mr. Snyder of Baltimore said it was a pertinent question, "Who is voting here, and who is entitled to vote?" W. H. Chambers of Chicago called for a vote in proper form. As the chair had previously announced the vote, a parliamentary question was sprung which opened up a "promising mix-up." It served, however, to disclose Mr. Grimes' fine capacity as a presiding officer, and if he found himself compelled finally to resort, in the interests of haste, to "Czar Reed's" rules, he did it with all that eminent speaker's effectiveness and dispatch, although with more skill than the "Czar" is some-



WALLACE M. BELL.
Chairman of Milwaukee Delegation.

times credited with to leave his house good-natured when "all was over."

By a vote in form Mr. Tanner's resolution was defeated, 657 members voting aye by their representatives or in person and 1,123 voting no.

The report as read was then adopted.

J. A. King of Iowa presented the report of the committee on resolutions, which was adopted, as follows:

CROP REPORTS.

Inasmuch as the points so ably brought out in the paper read by Mr. H. S. Grimes, relating to the present system of obtaining the government crop report are of such vital importance to the trade at large, it is

Resolved, That the Grain Dealers' National Association, in convention assembled, endorse the thoughts expressed therein and respectfully recommend that the matter be referred to the legislation committee, with instructions to confer and work with a similar committee recently appointed by the National Hay Association to work for the adoption of some plan which will improve and render such reports more accurate and reliable.

INTERSTATE COMMERCE.

Resolved, That we memorialize congress as follows: To the Senate and House of Representatives of the United States, to assemble in the Fifty-Seventh Congress:

The Grain Dealers' National Association, in convention assembled at the city of Des Moines, Iowa, on the 3d of October, 1901, does hereby respectfully memorialize your honorable bodies to enact into law such amendments to the existing Interstate Commerce Act as will effectually remedy the defects that have been found to exist therein and will insure its proper enforcement in the protection of the public interest in relation to transportation, and yet will in no way impair the just rights or privileges of common carriers.

It is the belief of this convention that the present law has been rendered practically inoperative by recent decisions of the Supreme Court and that the

public is without redress against originating new and better varieties and discriminations on the part of common carriers.

Your petitioners, therefore, earnestly pray that your honorable bodies will give the subject the consideration which its great importance demands and provide speedy relief to the public by the enactment of such amendments to the law as will give it full force and effect.

BUCKET SHOPS.

Whereas, The so-called dealing carried on in bucket shops has become the national mode of gambling and consists of merely betting on the fluctuations of the market prices of commodities and securities bought and sold on the commercial and financial exchanges of the country; and,

Whereas, This form of gambling is a serious detriment to the grain trade and a constant menace to values, thereby working a great injustice and injury to producers throughout the land, as well as tending to promote a low state of public morals; therefore, be it

Resolved, That the Grain Dealers' National Association, in convention assembled, respectfully but urgently petition the Congress of the United States to so amend a paragraph of schedule A of the United States revenue act by increasing the ratio of taxation on this illegal and pernicious traffic carried on in bucket shops as to render the same unprofitable, and that whenever the war revenue act shall be repealed the said act be permanently incorporated in the United States excise laws.

Resolved, That a copy of these resolutions be forwarded to each of the houses of Congress and to each senator and congressman from the several states represented in the membership of the Grain Dealers' National Association.

EXPERIMENT STATIONS.

Resolved, That we recognize the practical value and beneficial influence of the work of the agricultural experiment stations of the United States in their efforts to improve the yield and quality of farm crops by selecting, improving, and originating new and better varieties and by introducing improved methods of cultivation, and we heartily commend this work, wisely inaugurated by the United States government, and bespeak for it liberal support by the legislatures of the respective states.

WAR TAXES.

Resolved, That in view of the surplus now in the United States Treasury the onerous war taxes to which all dealers in grain are subjected should be abolished, and our senators and representatives in Congress are urgently requested to use their influence to accomplish such result.

KANSAS CITY BOARD OF TRADE

Whereas, It is reported that in the Board of Trade rules of Kansas City there is in effect a rule prohibiting its members from affiliating with any grain dealers' association, therefore,

Resolved, The Grain Dealers' National Association respectfully request them to revoke that rule so far as it applies to this Association, and hereby cordially invites them and each of them to become members of this organization.

LOUISIANA PURCHASE RESOLUTIONS.

Whereas, There is to be held in the city of St. Louis, in the year 1903, a World's Fair and Louisiana Purchase Centennial, celebrating the purchase of the Province of Louisiana from France in 1803; and

Whereas, The United States Congress has appropriated the sum of \$5,000,000, the city of St. Louis raised \$10,000,000, the state of Missouri appropriated \$1,000,000, and other states suitable amounts; and

Whereas, This World's Fair and Centennial Exposition in scope and design will be one of the greatest in the history of the world; therefore, be it

Resolved, That the National Grain Dealers' Association, in convention assembled, hereby endorse and approve of this great celebration and commend it to the members for their efforts to promote its interests.

COURTESIES ACKNOWLEDGED.

Resolved, That the Grain Dealers' National Association is desirous of expressing to the officers and members of the Cereal Club, to the state of Iowa, through his excellency, the governor, and his honor, the mayor, their appreciation of and warmest thanks for the very hospitable reception and entertainment of which we have been the grateful recipients.

Resolved, That the thanks of the Association are tendered the press for their very full and complete reports of the proceedings of the Association.

Resolved, That the thanks of the Association are tendered to the hotels for their generous treatment.

Resolved, That the thanks of the Association are tendered to the Western Union and Postal Telegraph companies for the splendid market reports and other courtesies furnished the Association.

Resolved, That the thanks of the Association are tendered the officials of the city railway of Des Moines for courtesies extended and the free use of their cars.

RAILROADS THANKED.

Resolved, That the members of this Association highly appreciate the generous treatment accorded us by the several railroads which afforded free transportation to so many of those attending this meeting and we hereby tender them our thanks, therefor.

THANKS TO OFFICERS.

Resolved, By the Grain Dealers' National Association, that it extend to the president, Mr. B. A. Lockwood, and the secretary-treasurer, Mr. Chas. S. Clark, the thanks of the Association for their active manner and untiring efforts in behalf of the Association during the past year. We especially commend them for the grand work they have done in affiliating the various local associations of the country with the Grain Dealers' National Association.

Mr. England of Baltimore then presented the report of the committee on nominations, as follows:

Your committee appointed to nominate officers for the ensuing year beg to report, that after long and careful consideration they are of the opinion that upon this occasion wisdom dictates a departure from the usual custom of rotation in office for the reason that the Association during the past year has started a new development and that it will be to its advantage that the present officers be continued for another year, especially in consideration of their efficient and faithful service. We therefore offer in nomination the following: President, B. A. Lockwood, Des Moines, Iowa.

First Vice-President, Theodore P. Baxter, Taylorville, Ill.

Second Vice-President, H. S. Grimes, Portsmouth, Ohio.

Directors: Arthur R. Sawers, Chicago, Ill.; Jay A. King, Nevada, Ia.; D. Hunter, Hamburg, Ia.; L. Cortelyou, Muscotah, Kan.; J. A. Carden, Winfield, Ia.; J. P. Harrison, Sherman, Texas; F. D. Stevens, Purell, I. T.; Thomas Costello, Maroa, Ill.; J. W. McCord, Columbus, O.; E. A. Grubbs, Greenville, O.; A. W. Loughry, Monticello, Ind.; J. B. Newman, South Milford, Ind.; C. M. Barlow, Kokomo, Ind.; James Wellington, Anderson, Ind.

On motion the report was adopted.

Again the question of location of the meeting for 1902 came to the front, Mr. King of Iowa calling the chair's attention to the palpable fact that the delegates felt a genuine desire to express themselves on that subject. He was, of course, ruled out of order, but on the suggestion of Mr. Grimes of



H. A. FOSS.
Chief Weighmaster of Chicago Board of Trade.

Ohio, who said the question might be submitted informally as a matter of courtesy by the chair. President Lockwood ordered a roll call as requested. Mr. Tanner was given one minute to speak to the question. He opposed Milwaukee, because that market, after Chicago had abolished privilege trading, had taken it up, and he rapped Kansas City over the knuckles, appearing as a candidate for the next convention and yet being "out of this Association's jurisdiction," the rules of its Board of Trade not allowing its members to belong to this or any other association of grain dealers, except exchanges. He was for Memphis, "in the land of julips," and the assemblage was with him.

President Lockwood, after the vote favoring Memphis, finally dismissed the matter by saying that the board of directors would issue a bulletin on this subject later.

The report of the committee on arbitration, printed above, was taken from the table and formally adopted.

C. A. Burks of Illinois, chairman of the committee on trade rules, made a report which was adopted, as follows:

Your committee on trade rules, after a careful consideration and thorough discussion of the various phases of the grain business throughout the entire producing and consuming of these United States, having the best interest of the entire trade at heart, beg leave to suggest that, owing to the wide area to be covered and the diversified interests to be equally represented, and having in mind the fixed customs prevailing in the large primary markets, do not deem it advisable to adopt fixed rules at this time, but offer and recommend that the following suggestions be observed and carried out by the trade, which we feel

sure will do much to bring about a more uniform custom, eliminate friction and foster a better understanding and closer relations between the interior dealer and primary or intermediate markets.

Your committee recommends further that the presidents of the various local associations and of the boards of trade and exchanges at all primary markets appoint committees to formulate their trade customs into a set of rules governing the transactions between interior dealers and the buyers at primary markets.

That the chairmen of these various committees so appointed shall constitute a national committee, which shall meet and formulate as nearly as practicable a set of rules and report the same at the next annual meeting of the Grain Dealers' National Association. The chairman of this committee shall be appointed by the president of this Association.

RECOMMENDATIONS OF THE COMMITTEE.

1. Confirmation.—It shall be the duty of the purchaser of grain to mail the seller on the day of purchase a written or printed confirmation in keeping with the specifications named in card or wire bid, setting forth the number of bushels purchased, kind and grade of grain, railroad and point of shipment.

ing instructions as provided in paragraph 1 will suffice. Purchaser of grain may change billing instructions by and with the consent of the seller during the life of the contract.

4. Shipment.—Should the seller find on the last day of a contract that he will not be able to fill the sale within the time specified, it shall be his duty to advise purchaser by mail, wire or 'phone of his probable deficit, at which time the purchaser may elect to cancel, extend time of shipment at either the original or agreed price, or advise seller that he will be obliged to buy in said deficit to the best advantage for him, the seller's account, and render a statement accordingly.

5. Demurrage.—The seller shall be liable for any demurrage charges accruing on grain billed to "shipper's order" occasioned by the purchaser's not having bill of lading in hand so that he could have given disposition of said grain.

6. Sample Sales.—It shall be the duty of the seller of grain by sample to deliver grain fully up to sample, shipment to be made according to the terms of contract. The inspection committee, or some duly authorized committee of the market to which the grain was billed, shall pass upon such shipments, providing

exchange or disinterested public weights shall govern.

13. Interior Shipments.—No grain sold on regular market terms shall be forwarded by purchaser to interior points without the consent of the seller.

14. Invoice.—It shall be the duty of the shipper of all grain to mail purchaser or consignee on day grain is loaded an invoice of such shipment, setting forth the car initial and number, kind of grain, actual or estimated weight, price if to be applied on sale, otherwise the notation "consigned," amount of draft drawn and how billed.

Announcements were made of forthcoming entertainment features, and thereafter the meeting adjourned sine die.

ELECTION OF A SECRETARY.

Following final adjournment the board of directors held a meeting at the Savery to reorganize. Mr. C. S. Clark was reelected secretary for the ensuing year, but declined to serve.

Thereupon Mr. Geo. A. Stibbens of Red Oak, Ia.,



VIEW FROM THE STAGE OF THE DES MOINES AUDITORIUM, TAKEN DURING THE SMOKER ENTERTAINMENT ON OCTOBER 3.

price, time given for shipment, terms, billing instructions in keeping with the rules of the railroad on which the shipment is to originate at time of sale, kind of cars to be loaded, and any other points purchaser may deem worthy of mention. It shall also be the duty of seller to confirm sale in writing the same day as made, setting forth the number of bushels sold, kind and grade of grain, railroad and point of shipment, price, time within which grain is to be shipped, terms and agreement to abide by any other conditions named in card or wire bid.

2. Time for Shipment.—"Immediate shipment" shall mean that the seller has three days in which to load and bill grain, including day of sale, Sundays and legal holidays. "Quick shipment" shall mean within five days, with the same specifications as above. "Prompt shipment" shall mean within ten days, with the same specifications as above. Shipment within any number of days shall mean to include day of sale, Sundays and legal holidays. Contracts maturing on Sundays or legal holidays, the shipment shall be made on preceding business day. Specific number of days should be mentioned in all contracts.

3. Billing Instructions.—In case grain is sold for "immediate" or "quick shipment," the purchaser shall wire billing instructions unless same shall be understood or given in card bid or embodied in wire bid. In case sales are made for "prompt," or any specified number of days other than above indicated, mail bill-

purchaser shall refuse to receive same upon contract on account of quality. Should said committee decide that grain tendered was not up to sample, it shall be the duty of seller to adjust difference satisfactorily with purchaser.

7. Loading.—It shall be the duty of the seller of grain on track, or to arrive, to load all cars in keeping with the rules and regulations of originating railroads, and to be liable for any charges accruing by non-observance of same.

8. Terms.—The word "terms" shall mean weights and grades guaranteed by shipper in market in which grain is billed, as agreed upon at time of sale.

9. Telegrams.—The sender shall prepay all telegrams unless by agreement party to which same is addressed has previously consented to pay for such message.

10. Acceptances.—Wire and 'phone acceptances to mailed track bids must reach the office of the bidder within the limit of time specified therein. All wire bids or offers should give time limit for acceptance.

11. Surplus Shipments.—All surplus shipments on track sales, or sales to arrive, shall be handled according to rules of the market to which the grain was billed.

12. Regular Market Terms.—By "Regular Market Terms" the trade shall understand official inspection by an official inspector of some board of trade or state inspection department; and board of trade or regular

was elected secretary, and voted a salary of \$2,000 and a headquarters.

Some other business of an executive character was transacted, whereupon the committee adjourned.

MEETING OF GRAIN INSPECTORS.

On October 3 the chief grain inspectors in attendance at the meeting met in Parlor I of the Savery and effected a permanent organization. Mr. Jos. E. Bidwell of Illinois acted as temporary chairman.

There were present Jos. E. Bidwell of Chicago, John O. Foering of Philadelphia, J. D. Shanahan of Buffalo, Chas. McDonald of Baltimore, W. H. Gooding of Missouri, F. H. Tedford of Kansas City, Mo., E. H. Culver of Toledo, B. J. Northrup of Kansas City, Kan., C. T. Prouty of Kingfisher, Okla., Homer Chisman of Cincinnati, and M. F. Fears of St. Louis.

The organization was perfected by the election

of John O. Foering of Philadelphia as president and J. D. Shanahan as secretary-treasurer.

The object of the Association is stated to be as follows:

This organization shall be known as the Chief Grain Inspectors' National Association. Its purposes are closer intercourse of the chief inspectors of the United States, with a view to preventing those differences which often arise where a misunderstanding of the customs of the various markets exist, and to advance the general interests of the grain trade by a more intelligent application of the grades and standards established in the different cities, and also for social and business intercourse.

GRAIN AND MACHINERY EXHIBITS.

A tent adjoining the auditorium was devoted to exhibits of grains from various parts of Iowa, together with complete official samples from all the markets of the United States represented at the convention by its chief inspectors. The samples covered all grades of wheat, corn, oats and rye, all labeled by grade and market. The exhibit was unique, being the first display of grain in this form ever made, and it was found most instructive to the shippers present who examined it.

A number of agents of gas engines and other machinery for elevators occupied space in the same place. Those exhibiting were as follows:

Ideal Automatic Car Loader, manufactured by the Ideal Car Loader Co., Allenville, Ill.; in charge of G. P. and J. R. Martin.

Special Car Mover, manufactured by H. Kurtz & Son, Sac City, Iowa, in charge of S. E. Kurtz.

Special exhibit of the Globe Machinery & Supply Co., Des Moines, Iowa, in charge of C. L. Buxton and J. A. Bramhall.

Lewis Gas Engine, manufactured by J. Thompson & Sons Mfg. Co., Beloit, Wis., in charge of A. J. Pratt.

Boss Car Loader, built by the Maroa Mfg. Co., Maroa, Ill., in charge of H. P. Harpstrite.

Day's Dust Collecting System, in charge of F. L. Day.

Exhibit of Barnard & Leas Mfg. Co., Moline, Ill., in charge of M. M. Snyder.

Scales of the Des Moines Scale & Mfg. Co., Des Moines, Iowa, in charge of A. L. Smouse.

Exhibit of flour and breakfast foods of Shannon & Mott Co., Des Moines, Iowa.

There were also shown samples of grain from the various counties of Iowa, with stalks of corn from Polk County, measuring 18 feet in height.

MACHINERY MEN PRESENT.

There were present the following machinery men:

S. J. McTiernan, representing the Huntley Mfg. Co., Silver Creek, N. Y.

Edw. A. Ordway, representing The Invincible Grain Cleaner Co., of Silver Creek, N. Y.

Victor Wilnot, representing the Dodge Mfg. Co., Mishawaka, Ind.

S. E. Kurtz, of H. Kurtz & Son, Sac City, Iowa.

C. L. Buxton and J. A. Bramhall, representing the Globe Machinery & Supply Co., Des Moines, Iowa.

M. M. Snyder, representing the Barnard & Leas Mfg. Co., of Moline, Ill.

G. P. and J. R. Martin, of the Ideal Car Loader Co., Allenville, Ill.

A. L. Smouse, representing the Des Moines Scale & Mfg. Co., Des Moines, Iowa.

F. L. Day, representing Day's Dust Collecting System, Minneapolis, Minn.

H. P. Harpstrite, representing Maroa Mfg. Co., Maroa, Ill.

J. P. Morey, representing Des Moines Gas Engine Co., Des Moines, Iowa.

J. T. Baughan, representing the Hall Distributor Company, of Omaha.

HOW THE DELEGATES GOT THERE.

The large attendance is undoubtedly due to the generosity of the railways in providing free transportation from the leading market centers to Des Moines and return. The initiative was taken by the

Chicago & North-Western Ry., which provided a day train to carry to Des Moines all delegates and other Association members who should rendezvous at Chicago. Following this initiative, the C., B. & Q. provided a train from St. Louis for those meeting at that point, the Wabash for those meeting at Kansas City, the Minneapolis & St. Louis for the Minneapolis delegates and the C., M. & St. P. for the Milwaukee representatives.

The preparations of the Chicago & North-Western were on an elaborate and generous scale. The train provided consisted of eight coaches and a baggage car, including chair cars and the general officers' observation car. The train was filled with passengers—not to a crowded condition, however, for all had an abundance of room and enjoyed the ride in the greatest physical comfort. A beautiful 16-page itinerary was provided, giving the program of the convention, as well as the time-table and map of the run to Des Moines and an illustrated sketch of Iowa, together with statistics of Iowa's crops.

As soon as the train had left the city behind, dinner tickets were sold; and the exact number of guests being known in advance, when the train reached Cedar Rapids the guests found waiting for them at the company's depot dining room and at the adjoining hotels an excellent hot dinner, to which all sat down simultaneously to eat at leisure,

having made the 360.7 miles in less than eleven and a half hours, including an hour's stop at Cedar Rapids and stops of some length at Clinton and at Ames.

The same most excellent management characterized the trip of October 4 and 5 to Sioux City and return, in the same train, with stops en route at Ames and Boone; and the road's guests arrived again in safety at Chicago on Saturday evening, satisfied that the North-Western motto, "The Best of Everything," is well lived up to; for all were thoroughly delighted with the company's most generous outing.

We have received from the dealers of Decatur, Ill., the following:

Whereas, The St. Louis grain dealers did extend to their patrons a cordial invitation to join them in their pilgrimage to the National Grain Dealers' Association, and did entertain them so hospitably throughout the entire trip, and did share with them the courtesies of the C., B. & Q. R. R. Co. in the way of free transportation on a special train both to and from Des Moines; therefore, be it

Resolved, That we, their invited guests, in committee assembled, feeling that the trip has been both profitable and pleasant, do return to the St. Louis grain dealers and to the C., B. & Q. R. R. Co. our sincere thanks for the many favors bestowed. (Signed by the committee.)

The North-Western's excursion to Sioux City was uneventful, though very pleasant. The train left Des Moines at 9 a. m., carrying the Chicago and



GRAIN DEALERS' SPECIAL TRAIN, CHICAGO & NORTH-WESTERN RY., AT CEDAR RAPIDS, IOWA.

with abundance of time ahead of them, the stop being for over an hour.

The arrangements had been so perfectly planned and carried out, and the ride proved so enjoyable, that the following resolution, presented at Cedar Rapids, was unanimously adopted as in some faint degree expressive of the satisfaction of the company's guests:

Whereas, The officials of the Chicago & North-Western Railway Company have furnished the members of the Board of Trade of the city of Chicago and of the various grain dealers' associations, a special and elegantly equipped train in charge of Mr. E. D. Brigham, general freight agent; Mr. W. B. Kniskern, general passenger agent; Mr. J. L. Ferguson, assistant general passenger agent, and their able assistants, Mr. F. R. Eyman, assistant general freight agent; Mr. W. E. Morse, superintendent of the Galena Division; Mr. H. J. Slifer, superintendent of the Iowa Division; Mr. H. R. Sanborn, superintendent of the Sioux City Division, for the meeting of the Grain Dealers' National Association, Chicago to Des Moines, Sioux City and return, covering a period of five days; therefore, be it

Resolved, That we tender our sincere thanks in high appreciation of the liberality and public spirit shown by this great railroad company and the unsparing endeavors in caring for this large delegation.

After the camera had been called on to make the photograph shown in our engraving, the guests resumed their seats, and after another pleasant ride arrived at Des Moines promptly on time, 7:20 p. m.,

eastern delegates, as well as many of the Des Moines dealers and southwestern delegates. The first stop was made at Ames, where the Agricultural College and Experiment Station were visited and where much buttermilk was consumed and the members' badges confiscated by the college girls' "football phalanx" in a spirited "rush." At Boone dinner was served, after which a stop was made at the North-Western's new iron bridge over the Des Moines River Valley, just west of the city—one of the largest structures of its kind in the world, and erected at the cost of considerably in excess of a million of dollars in order to shorten the through line to the Missouri River a few miles.

At Sioux City the party were met by representatives of the city and its business organizations and escorted to their hotels. The evening was passed informally at the Elks and Hawkeye clubs, the Commercial Club being the host. Next day the run home was made without stops except for meals.

THE DELEGATES.

It is quite an impracticable task, and one, perhaps, not of peculiar interest to many readers, to name all those present, although it might be done. As a record, however, the following list of officers and delegates for 1901 may be worth preserving.

Officers—President, B. A. Lockwood, Des Moines, Iowa; first vice-president, T. P. Baxter, Taylorville, Ill.; second vice-president, H. S. Grimes, Portsmouth, Ohio; secretary and treasurer, Charles S. Clark, Chicago, Ill.; directors, Arthur R. Sawers, Chicago, Ill.; F. J. Wright, Minneapolis, Minn.; D. Hunter, Hamburg, Iowa; P. E. Goodrich, Winches-

ter, Ind.; Fred Mayer, Toledo, Ohio; E. R. Ulrich Jr., Springfield, Ill.; H. L. Combs, South Whitley, Ind.; J. H. Conger, Eaton, Ohio; Geo. S. Hayes, Hastings, Neb.; J. F. McCormick, Ambia, Ind.; L. Cortelyou, Museotah, Kan.

Delegates of Affiliated Associations.—The official delegates of the thirteen associations affiliated with the National Association were selected on the basis of one delegate for each twenty members in good standing and one for the fraction of twenty members remaining. The delegates were entitled to cast one vote for each member they represented. The delegates selected were as follows, and most of them were present, although many were not:

Iowa Grain Dealers' Association.—E. J. Edmunds, Marcus, Iowa; J. R. Marfield, Winona, Minn.; W. S. Slagle, Alton, Iowa; D. J. Jenks, Coon Rapids, Iowa; R. Tronedle, Minneapolis, Minn.; E. A. Brown, Luverne, Minn.; M. E. De Wolf, Laurens, Iowa; D. Milligan, Jefferson, Iowa; Lee Lockwood, Des Moines, Iowa; S. J. Clausen, Clear Lake, Iowa; H. S. Buell, Livermore, Iowa; F. A. Grulich, Keystone, Iowa; E. L. Bowen, Des Moines, Iowa; E. E. Mitchell, Minneapolis, Minn.; J. N. Gilchrist, McGregor, Iowa; C. Webster, Waucoma, Iowa; Phil Deitz, Walcott, Iowa; G. E. Lewis, Keota, Iowa.

Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri.—D. Hunter, chairman, Hamburg, Iowa; G. H. Currier, Prescott, Iowa; W. F. Johnston, Fontanelle, Iowa; O. T. Hulburd, Osceola, Iowa; Wm. L. Shepard, Des Moines, Iowa; G. A. Stibbens, Red Oak, Iowa.

Kansas Grain Dealers' Association.—L. Cortelyou, Muscotah; F. P. Lint, Atchison; O. A. Higgins, Stockton; F. E. Brooks, Frankfort; F. G. Crowell, Atchison; M. H. Roller, Circleville; C. N. Lane, Cuba; R. Antle, Atchison; W. L. Perkins, Frankfort; C. R. Latto, Sylvan Grove; A. M. Hungerford, Mahaska; E. A. Woodman, Mahaska; D. E. Wickard, Chanute; A. J. Denton, Leavenworth; W. E. Murray, Frederick; L. B. Young, Hutchinson; E. N. Bailey, Beattyville; M. G. Patterson, Clay Center.

Texas Grain Dealers' Association.—J. P. Hornson, Shernian, J. Z. Keel, Gainesville; L. G. Belev, Pilot Point; C. F. Gribble, Sherman; H. Waldo, Collinsville; G. B. R. Smith, Howe; W. W. Andrews, Ft. Worth; H. H. Crouch, McKinney; E. R. Kolp, Henrietta; H. B. Dorsey, Weatherford.

Grain Dealers' Association of Southeastern Iowa.—John Baxter, Mt. Union; G. H. Carter, Pekin; Jos. Barton, Roscoe; D. K. Unsicker, Wright; J. A. Carden, Winfield; E. L. McClurkin, Morning Sun.

Eastern Indiana Division Grain Dealers' National Association.—J. A. Mouch, Mooreland; S. B. Sampson, Cambridge City, and J. L. Schalk, Anderson.

Grain Dealers' Association of Oklahoma and Indian Territories.—Ed Humphrey, El Reno; J. C. Robb, Kingfisher; A. T. Haines, Kingfisher, and W. J. Stevens, Medford.

Illinois Grain Dealers' Association.—T. Costello, Maroa; S. S. Tanner, Minier; J. S. Wiley, Decatur; J. W. Radford, Chicago; H. C. Hall, Paxton; H. N. Knight, Monticello; Ross Hockaday, Oreana; W. C. Kreider, Tonica; E. J. Very, Armington; Harry Hudson, Chicago; R. J. Railsback, Minier, and J. H. Herron, Sidel.

Ohio Grain Dealers' Association.—H. S. Grimes, Portsmouth; C. F. Barnthorse, Morral; J. B. Seymour, Kenton; Oliver Jay, St. Mary's, and Myron Silver, West Jefferson.

Western Ohio Division Grain Dealers' National Association.—J. H. Conger of Eaton and D. L. Mote of Noggle.

Western Indiana Division of the Grain Dealers' National Association.—B. F. Crabbs, Crawfordsville; W. T. McCray, Kentland, and R. E. Hartley, Goodland.

Eastern Indiana Division Grain Dealers' National Association.—J. L. Schalk, Mooreland; J. L. Schalk, Anderson, and S. B. Sampson, Cambridge City.

Central Indiana Division of the Grain Dealers' National Association.—J. M. Euyart, Galveston, and M. Garrison, Converse.

Every grain exchange was invited to send delegates and the following were appointed or attended:

Cleveland.—C. M. Folson, A. W. Gibbons, E. A. Williams.

Detroit.—C. A. Burks, F. F. Caughey, L. A. Parsons.

Philadelphia.—John O. Foering.

Chicago.—William N. Eckhardt, George E. Marey, W. H. Chambers, E. L. Merritt, H. H. Peters, C. A. Weare, C. B. Slade, W. H. Chadwick, F. H. Babcock, J. J. Keller, A. N. Young, S. C. Scotten, E. L. Glaser, J. H. Miles, A. Gerstenberg, D. H. Winans, E. B. Baldwin, P. H. Eschenberg, L. Everingham, I. P. Rumsey, George F. Stone.

Memphis.—R. L. McKellar.

Minneapolis.—F. H. Peavey, J. L. McCaull, J. S. Mathewson, R. Troendel, W. O. Timmerman, A. E. Martin, W. P. Devereaux, A. M. Woodward, E. E. Mitchell, George C. Harper, Charles Christensen, William Griffith, M. W. Lee, C. E. Kerriek, J. F. Whallon, C. E. Wenzie, A. E. Burch.

St. Joseph, Mo.—C. A. Dayton, Ike Matter and William Burke.

St. Louis, Mo.—Erich Picker, J. L. Messmore, Wm. A. Gardner, Geo. L. Graham, Henry R. Whitmore.

Cincinnati.—Charles B. Murray, Homer Chisman, W. R. McQuillan, D. F. C. Grote.

Baltimore.—Jas. A. Clark, Wm. Rodgers, Chas. England, Chas. McDonald Jr., Walter Kirwan.

Among the hundreds of others who were present as individual members and as visitors were the following:

The Chicago delegation included W. N. Eckhardt (chairman) and J. W. Rodford, Pope & Eckhardt Co.; Arthur Savers, Geo. B. Dewey and M. H. Bennett, Calumet Grain & Elevator Co.; L. B. Wilson and G. B. Van Ness, Van Ness & Wilson; Jos. P. Griffin, The Glucose Sugar Refining Co.; Clarence H. Thayer, Fred Faulkner, A. E. Burch, J. A. FitzSimmons, W. R. Mumford Co.; W. H. Merritt, W. H. Merritt & Co.; A. Gerstenberg and H. Hahn, Gerstenberg & Co.; I. P. Rumsey and F. N. Burch, Rumsey, Lightner & Co.; H. M. Poynter, L. H. Manson & Co.; C. G. Ehle, Ware & Leland; George E. Marey, Armour Grain Co.; W. F. Johnson, W. F. Johnson & Co.; D. S. Losier and J. J. Jones, Losier & Hooper; W. P. Anderson, Norton & Switzer; C. H. Appel; Frank A. Maurer, Irwin, Green & Co.; F. H. Babcock, McReynolds & Co.; Walter Fitch, Northern Grain Co.; Jos. E. Bidwell, chief grain inspector; Jos. E. Dalton, Eschenburg & Dalton; H. T. Peters and C. G. Case, Bartlett, Frazier & Co.; E. B. Baldwin, Baldwin & Stone; B. L. Coon, Churchill-White Grain Co.; F. J. Delaney, Nash-Wright Co.; R. S. Lyons, Merrill & Lyons, F. E. Winans, Hulburd, Warren & Co.; H. A. Foss, chief, A. E. Schnyler, assistant, J. A. Schmitz, inspector of scales of the Board of Trade, Weighmaster's Department; Albert Seckel and W. M. Timberlake, E. Seckel & Co.; A. M. Young, H. D. Wetmore; W. H. Sterling, M. J. Sheridan; R. B. Schneider, H. D. Russell, W. S. Powers, E. M. Ashley, F. J. Austin, Seth Catlin, grain examiner and sampler; W. H. Chadwick, Frank Cheattle, C. D. Dillon, Fred Dressler, Cyrus H. Dupee, R. Fairchild, F. J. Gallagher, W. S. Gilbreath, Henry L. Gorman, C. E. Gray, Alec Nicol, J. H. Pank, of the U. S. Maltsters' Association; W. J. Nye, Victor Nelson, W. H. Chambers, with the Peavey Grain Co.; H. Mueller, J. A. Morrell, H. L. Miller, J. T. McKenzie, John J. Leonard, Nathan Lederer, and many others.

Daniel P. Byrne & Co. of St. Louis were represented by Daniel P. Byrne, W. H. Karns and R. H. Wheeler; while the Parrott-Baxter Grain Co. of St. Louis was represented by T. P. Baxter and James Parrott; W. T. Haarstick, president of the Merchants' Exchange, was also present. J. K. Martin was in charge of the St. Louis train and had 165 persons to look after. The St. Louis delegation had an extra reception at Burlington on their return home, to which city they were formally welcomed by the municipal authorities, ex-Senator W. W. Dodge making the address. At Hannibal a stop of two hours was made for dinner and a peep at the street fair then in progress.

Kansas City had about seventy-five delegates present, which, considering that there are no members of the Association in that exchange, is doing pretty well. They all declared the meeting a

success, and that they might have captured the 1902 convention if they had made "a strenuous effort."

THE SMOKER FINALE.

The proceedings of the third day wound up with a lunch and smoker at the Auditorium on Thursday. The convention closed at 5 p. m., and immediately after the dining-room was thrown open and a superb luncheon served by the Des Moines Cereal Club, and "no rebate was allowed." At 8 o'clock the smoker began, the performance beginning with Chicago's contribution to the entertainment. The Chicago Board had sent a capital male quartet and a quartet of end men, who were assisted by P. H. Monks, Irish dialect specialties, and M. L. Hamlin, a most clever amateur, in the "Man from Kokomo." Then the St. Louis Glee Club did a turn at songs and dances; Kansas City followed with William Murphy, impersonator and eloc dancer; G. C. Farley, balladist, and Charles Lloyd Barney, as muscle posing, and, with his assistant, as heavy-weight lifter. Then the Cereal Club's specialists closed the performance with more music, and a capital monologist from Webster City, using the Swede dialect and giving musical imitations. Then the dining-room was reopened. Nobody waited long enough to see it closed.

GRADES IN WASHINGTON.

The Washington State Grain Commission, at its annual meeting at Tacoma, on September 10, instructed the chief inspector to prepare for export yearly fair average samples of Bluestem, Club and Red wheat, to be marked and designated "Washington Bluestem," "Washington Club" and "Washington Red" wheat, these samples to be sent to the Corn Exchange in Liverpool, and similar samples to be retained in the state inspector's office and furnished to dealers who may apply for them. The standards will be fixed as soon as the harvest is fully over. The average samples referred to above have no reference to the local standards of grain, but this year the average will be not lower than the No. 1 standard.

The board reestablished the weight tests of last year, which fix 60½ pounds as the standard weight for choice milling wheat, 58 as the minimum for No. 1, 56 for No. 2 and 54 for No. 3. All wheat of lower weight will be classed as "rejected." Bluestem mixed with 10 per cent or more of Red wheat will hereafter be graded Bluestem-red mixed, while more than 30 per cent of the Red will cause the lot to be graded as Red. A new grade of No. 1 White oats was established, and the percentage of other grains that might be mixed with No. 1 feed oats was reduced from 20 to 15 per cent.

ONTARIO GRAIN STANDARDS.

The Eastern Grain Standard Board of Canada met at Toronto on September 19 to fix the standards for the new crop, the standards affecting all grain grown east of Manitoba. The following gentlemen were present: W. D. Matthews, chairman, Toronto; Alexander McFee, R. F. Esdile and H. D. Metcalfe, Montreal; J. I. A. Hunt, London; J. W. Dunlop, Hamilton; J. L. Spink, Thomas Flynn, H. N. Baird and Charles B. Walls, Toronto; E. F. Craig, chief grain examiner, east of Port Arthur; Mr. McNeil, grain examiner, Kingston; Edward Adamson, chief grain examiner, Toronto.

The samples of grain submitted showed that the quality of Ontario grain is far below last year's average. The drouth of June and subsequent spell of wet weather made a widely varied sample. However, the standards, as fixed, vary very slightly from those of last year, the only changes being in the cases of oats Nos. 1 and 2, which were respectively fixed at standards of 34 and 32 pounds instead of 35 and 33.

Much of the grain that is now rushing into the elevators at Duluth is of low grade, rating about No. 2 Northern, because of its weight, although its milling qualities are good.

SONG OF THE CORN BINDER.

"With whir and jar
Heard near and far,
I lead the deadly strife;
With snarl and frown
Mow King Corn down,
Nor grieve the loss of life.

"Though proud in might
He stands aright,
I bind and lay him low;
No tear I shed
O'er prostrate head,
But smite, row after row.

"No pity spare
For silken hair,
Or limbs so strong and brave;
But shout with glee
His end to see,
The mow or stack his grave.

"A winsome sheen
His garb of green,
Bright as an emerald gem;
Soon pales in death
To feel my breath—
I sing his requiem.

"Corn long was King,
So poets sing,
But his reign is o'er for aye.
Gaze on yon field;
Your King hath kneeled,
And I'm enthroned to-day."

—Orlo L. Dobson in Farm Implement News.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

"A VERY INTERESTING BUNCH."

Editor American Elevator and Grain Trade:—Please find check for \$1 in renewal of subscription to the "American Elevator and Grain Trade." I find this trade journal very interesting to our entire office force. There is always quite a scramble among the boys to see who will have it first. You publish a very interesting bunch of grain news.

Yours truly, R. G. RISSER.
Kankakee, Ill.

A SUGGESTION.

Editor American Elevator and Grain Trade:—There is no question but what a gathering of dealers, such as was convened in Indianapolis, does good in rubbing off the rough places that will occasionally turn up in the trade, and there is no question but what the topics under discussion will eventually benefit the trade. It does seem to me, however, that a more immediate benefit could be derived from such a gathering if some time were taken for a verbal crop report. That is, each member could rise in his seat and in half a dozen words designate the territory he is in and the condition of the crop in that territory, thus enabling all the persons present to get a good idea of the crop that is about to be handled. I think that this feature would prove a drawing card and induce a larger attendance.

Yours truly, W. H. SMALL.
Evansville, Ind.

CONVENTIONS NOT WITHOUT GOOD RESULTS.

Editor American Elevator and Grain Trade:—In reference to the annual meeting of the National Hay Association, held at Indianapolis, it is my candid opinion that the accomplishment was as much as attends any convention of its nature. While not largely attended, the questions brought up are vital to the future welfare of the hay business, and the Association, if successful in its proceedings now under progress, should make all shippers and receivers of hay happy at the results, and in future boom the attendance at the annual meetings.

The good accomplished by the conventions is not always apparent at the time of convention, but the interchange of ideas and friendly greeting of acquaintanceship between shippers and commission men often result in good business during the following year. I should like to attend all conventions and trust there will be a good attendance next year at the convention, and give the workers loyal support and a successful period will surely come.

Any assistance that can be given to the Associa-

tion by the "American Elevator and Grain Trade" will be duly appreciated by me.

Yours very truly, JAS. W. DYE.
St. Louis, Mo.

COMPLETING NEW PLANT.

Editor American Elevator and Grain Trade:—We are completing a 35,000-bushel elevator with all the machinery for cleaning grain, shelling corn, clipping oats, and are putting in scales for sacking corn in uniform weights. The plans and machinery were furnished by Nordyke & Marmon Company, and no expense has been spared to reduce the fire risk to a minimum and to make it substantial. With our warehouse this will give us a present capacity of about 175 cars of grain and hay. In addition we shall put up storage tanks next year for storing grain.

Yours truly, W. H. SMALL & CO.
Evansville, Ind.

THE HAY ASSOCIATION IS HELPFUL.

Editor American Elevator and Grain Trade:—The National Hay Association is of great value to the shippers of and dealers in hay. It protects their interests to a large extent in many ways. It would be a calamity to the hay trade if this Association should consider the feasibility of disbanding, which we do not think at the present time they contemplate.

The recent meeting at Indianapolis was a great success, much good was accomplished in the shaping of the interests of the hay trade. We do not know of anything at the present time that can be suggested beyond what was considered at the recent convention for the benefit of the trade, but may have some suggestions in the future.

Yours truly, N. H. CLEMINSHAW.
New York City.

A PAYING INVESTMENT.

Editor American Elevator and Grain Trade:—Here with we inclose our check for \$3 for three yearly subscriptions to the "American Elevator and Grain Trade." Address one copy to us at Leverett, Buena Vista Co., Iowa; one to Ware, Pocahontas Co., Iowa, and one to Pocahontas, Pocahontas Co., Iowa.

We believe that if all companies would see that their agents are supplied with some good trade paper each month they would be doubly repaid for the investment. If every operator of an elevator could have read carefully the articles in the recent issues of your paper relative to fire hazards, we believe it would save many elevators from destruction from "unknown causes." Please send us three extra copies of the August and September editions and start our subscriptions for three copies with the September number.

Yours truly, WHEELER GRAIN & COAL CO.
Laurens, Iowa.

AN EFFORT WORTHY OF SUPPORT.

Editor American Elevator and Grain Trade:—Besides the great work accomplished in securing a hearing before the Interstate Commerce Commission on October 2, at Buffalo, N. Y., with reference to the advance in hay classification on the part of the transportation companies, and the very excellent papers read before the convention, together with a new up-to-date constitution and by-laws, the convention impressed me more than ever of the great opportunity for personal acquaintance. This feature is virtually hidden, for it does not appear to any extent in the published proceedings, yet the acquaintance that one makes in attending the convention overshadows, to my mind, every other benefit that is derived and there are many. The Association is stronger numerically than ever, and it bids fair to be one of the largest commercial organizations of its kind in the country, for a greater interest in the work that is being accomplished is more manifest than ever.

The meeting at Indianapolis was a decided success in every particular, and there is, and will be, a great deal of good accomplished by reason of the meeting.

If the Association succeeds in having the old sixth class restored on baled hay, it will save to shippers

hundreds of thousands of dollars, in the way of less rates of freight, in the course of a year. This one item alone should decide every shipper in the country to become a member of the Association. With kind regards, I am, as ever, believe me,

Very sincerely yours, F. F. COLLINS.
Cincinnati, Ohio.

LOOKS FOR GOOD RESULTS.

Editor American Elevator and Grain Trade:—I think that our National Hay Association meeting at Indianapolis, in a general way, was a success. It is possible that we did not accomplish as many reforms as at some of our other meetings, where our attendance has been larger.

In my opinion, the matter of the most vital importance that is before the Association to-day is the change in the classification of freight rates, but with the present committee that has this matter in charge, I feel confident of ultimate good results.

I believe that our annual meetings have done much good in bringing together the shipper and receiver and thus establishing a closer commercial bond between the men in our line of business. There is much work for the Association yet to do, and being guided by its present able body of officers, I believe that the work will be done thoroughly and well. Our increase of membership during the last year of nearly one hundred argues well for the future success of our undertakings.

Yours very truly, JOHN L. DENTER.
Detroit, Mich.

A RETROSPECTIVE VIEW OF THE HAY CONVENTION.

Editor American Elevator and Grain Trade:—The eighth annual convention of the National Hay Association, held at Indianapolis in September, has passed into history. If we are to judge of the amount of work accomplished, the number of delegates in attendance and the many social features tendered by the citizens of Indianapolis, the convention was a thorough success.

The annual report of the president summarized briefly, yet forcibly, the events which had marked the previous year. New problems had been brought forward and met by the directors. The Association had been active in its attempt to assist in the passage of the Cullom Bill in connection with the League of National Associations. The Association had earnestly sought to procure the passage of this or a similar bill, which would give to the Interstate Commerce Commission the power to enforce its mandates and decrees. Unfortunately, the work was not crowned with success; and, as was stated by the chairman of the committee on legislation, it was probably for the same reason that a certain Senator failed of re-election. This Senator, after many years of public service, finding that the legislature did not re-elect him, wired to Washington, "Run over by a railroad." Several committees with special duties had been appointed and reported to the Association. The subjects of national grades, cipher code, fire insurance, crop reports, were all of interest to everyone engaged in the baling and shipping of hay.

The year had brought with it greater responsibilities in connection with the classification of hay. The earnest work undertaken by Chairman Cunley of the transportation committee should be especially commended. His arguments with the chairman of the official classification committee were such that it would seem Mr. Gill must have recognized their force. After considerable delay, and by the direction of the president and his officers, complaint was filed before the Interstate Commerce Commission. This suit is now pending and it behooves all persons, whether producers, balers, shippers or receivers, to aid in having hay restored to sixth class.

The adoption of a new constitution, which had been carefully considered by the committee appointed for that purpose, was a special feature of the convention. Several changes which time showed to be needed were made. Formerly the location of a member was immaterial. At present his business must be located within the United States. Under the existing circumstances this

must appeal to all who are familiar with the situation. The enormous increase of imports from a few thousand tons to hundreds of thousand tons in a single year, brought about by the change in classification, shows the inconsistency of allowing Canadian shippers to be members of the Association. The constitution now provides that the finding of the committee on arbitration and investigation shall be enforced by the directorate and a member found guilty of uncommercial conduct or a breach of the constitution and by-laws may be reprimanded, suspended or expelled. A new committee, to be known as the committee on statistics, is to be provided for and its duties are to collect and report on all matters concerning the quantity of hay imported and exported and all other facts, statistically arranged, which may be of interest to the members. The president has imposed upon him the duty of appointing a claim agent. This certainly is a novel feature and one that should command the attention of all the members. Many shippers lose considerable sums annually either because of the failure to press claims or because of their ignorance in making them up. This claim agent is entitled, under the rules, to the usual fees for collection. Certain it is that no other association has such an agent, and while the claim agent feature is novel, yet it is believed that if a member have a valid claim against a railroad or some other party and it is known that the Association is as a unit behind the claim, if the claim be a valid and legitimate one, payment of it will be made quicker than if an individual should ask for it in a half-hearted manner.

The papers read at the different sessions of the convention show that among the members we have thinkers as well as business men. Special mention should be made of the able paper by S. W. Little on "Commercial Law." No business man can afford to be without some knowledge of the law appertaining to his transactions. The law of contract, bills of lading and kindred matters should be at his fingers' ends.

The report of the various chairmen of committees show that one and all had done the work assigned them properly and zealously. The labor of some was particularly burdensome; especial mention should be made of the chairman of the transportation committee, who not only devoted a great deal of time to the study of transportation in general, but also to the effect of the raise in classification. He was overzealous for the restoration of hay to sixth class and too much praise cannot be given him for his continuing and earnest efforts in this behalf.

The new officers are well equipped for their work and the committee on nominations could not have selected a better directorate than was put forward in their report. They have the confidence of the entire membership and it is safe to predict that they will have a year equally as valuable, if not more so, than any in the past. The committees which will be appointed by the executive will doubtless be better equipped for their various duties than their predecessors, because of the experience of others.

The Association has done a world of good in the past. It has succeeded in bringing together the two extremes, the producer and the consumer; has introduced to each other the shipper and receiver; brought about a uniformity of grades in all of the principal markets of the country; introduced harmony into the methods of doing the hay business and has placed the hay shipper and receiver among the respected business men of any community. The outlook for the future is equally bright. Much good can be accomplished by a unification of interests; by a system of reporting whereby if the purchaser refuses to abide by a contract that refusal, if unjustifiable, may be communicated to the members of the Association; by reporting to the Association such concerns as recently sprung up like mushrooms in Jersey City; by endeavoring to secure for hay in the classification its proper place, namely the sixth class, where it was for so many years; by the establishment of a national bureau of inspection and by joining hands with other na-

tional organizations to promote the interests of hay dealers.

It is to be regretted that the membership of the Association is not larger. More good can be accomplished by increased numbers. Comparatively little can be done with the present annual dues; more could be accomplished with a fewer membership and an annual assessment of \$25 or \$50. With either an increased membership or an increased annual assessment the utility of the Association could be increased fourfold and it is hoped that the new committee on membership, assisted by such able trade journals as the "American Elevator and Grain Trade," will accomplish the much-desired result.

Washington, D. C. JOHN B. DAISH.

ORGANIZATION IS POWER.

Editor American Elevator and Grain Trade:—While the business done at the National Hay Convention was mostly of a routine character, there were many suggestions offered in papers read and reports of committees' work which will be worked out in time, and will necessarily redound to the good of the hay trade at large.

The direct results of the Hay Convention, as I see them, are: A more united pull on the part of growers, balers, shippers and receivers to bring about those things needed.

This assembling together tends to engender greater efforts on the part of growers to raise and cure a better grade, the more progressive inculcating in those in the rear ranks advanced ideas in curing and handling and better preparation of lands. The convention is to its members like the spelling bee to our fathers and mothers—they were taught to spell by rubbing up against one another, and so the hay folk learn to make good hay and to know good hay in the same way.

The baler and shipper learn in what direction there will be a probable demand for certain classes of hay. The receiver, grasping the hand and looking in the eye of the shipper, can tell more in a few minutes about whether he would get cars topped off at doors, or No. 2 for No. 1, than in years from mercantile agency books or flashy letter-heads.

It is an annual love feast where several branches of the hay army meet in camp to discuss the new crop, its good and bad features; to explain away irritating letters received or sent. It tends to unify grades throughout the country, to fix rates, to make railroads know that they must respect old Hayseed and give him cars to load and warehouses for the product at terminal points. A few years ago the railroads thought any old car would do for the hay man, any old rate, and any old time to ship.

Organization is power, and organization is the one and only salvation for the agricultural interests.

Very respectfully, S. T. BEVERIDGE.

Richmond, Va.

Court Decisions

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Rights of Assignee of Storage Tickets for Converted Wheat.

A warehouseman engaged in operating a public warehouse for the receipt and storage of grain received a large quantity of wheat from different persons, and issued to them therefor the usual storage receipts. Subsequently he shipped the wheat without the knowledge or consent of the ticket-holders to Minneapolis commission merchants, who applied the proceeds to the payment of an indebtedness due them from the warehouseman. Thereafter the ticket-holders sold, indorsed and transferred their several tickets to a certain party, who demanded of the warehouseman and the commission men the return and possession of the wheat, which was refused. Then he sued the commission men for damages for the conversion of the wheat for which he held tickets.

In reviewing the case the Supreme Court of Minnesota holds, first of all (*Dolliff vs. Robbins*, 86 Northwestern Reporter, 772), that the sale, indorse-

ment and delivery of the tickets operated as a transfer and assignment to the party suing of all title to the wheat and every remedy possessed by the holders thereof, including the cause of action for its conversion. It says that it is unable to concur in the contention that because of the fact that the wheat represented by the storage tickets held by this party had been shipped out of the warehouse in which it was stored, and sold and converted by the commission men, prior to the transfer of the tickets to him, the mere indorsement and delivery of the tickets did not operate as an assignment of the cause of action for the conversion.

The tickets, the court says, were issued by a public warehouseman, and by statute such tickets are made transferable and negotiable by indorsement and delivery. They are negotiable—not, perhaps, to the full extent of bills of exchange and promissory notes, but to the extent of transferring the title to the property to an indorsee or purchaser, together with all rights and remedies of the holder. They are contracts in every sense of the term, and the assignment thereof must in the nature of things carry with it all rights incident thereto. The general rule of law with reference to storage tickets of this character, whether issued pursuant to some statutory requirement or otherwise, is that the sale of the tickets by indorsement and delivery operates as a transfer to the indorsee or purchaser of the legal title to the commodity represented thereby, and the warehouseman becomes liable to the indorsee to the same extent as to the original holder. And in case of such indorsement and transfer the indorsee may maintain an action against the warehouseman for injury to the property, whether the injury occurred before or after the transfer of the ticket. So, the court says, there can be no doubt that a transfer by indorsement and delivery of storage tickets of this kind passes to the indorsee or purchaser, not only the title to the wheat evidenced thereby, but all rights and remedies possessed by the holder at the time of such transfer as well.

Nor does the court consider that the mere fact that there may have been some secret agreement or understanding between the ticket-holders and the indorsee, to the effect that the transfer was to be considered as conditional, was material. The tickets in question were, in fact, transferred and delivered, thus conveying to the party suing the legal right to the tickets and all rights incident thereto, and the original holders could not thereafter, as to these commission men, or others who might deal with him as the owner of the tickets, be heard to assert or claim any right reserved in them of which no notice was given.

In the next place, the court holds that the commission men, though doing business as such, in the matter of the sale of the wheat in question and the appropriation of the proceeds thereof to the payment of the warehouseman's indebtedness, acted in their own interests and in their own behalf and not as mere agents of the warehouseman, and were liable as for the conversion of the wheat.

Last of all, the court says that where the conversion of personal property is accidental, and under the belief that the person has the right to the property, and he acts with no wrongful purpose or intent, the measure of damages is the value of the property at the time of the actual taking and conversion. But where the original taking and conversion is wilful and without color or claim of right the measure of damages is the value of the property at the time and in the condition it is in when demand for its return is made. And, within these rules, the court holds, there being nothing to show a wilful and wrongful conversion on the part of the commission men, the recovery of the assignee of the tickets should have been limited to the value of the wheat in question at the time when he had the right to demand its return, with interest, less the storage charges and the expense of transporting the same from the warehouse to Minneapolis, where it was sold and converted.

Send us the grain news from your county.

C. D. STEPHENS.

Claude D. Stephens, head of the recently organized firm of Stephens & Tyler, manufacturers, jobbers and designers of machinery, is a native of Iowa, having been born in Gowrie County, in that state, on July 24, 1874. He removed to Chicago in 1889, however, and attended the Evanston High School for two years thereafter.

This excellent school prepared him for a career, and on leaving school in 1892 he obtained a position with the Webster Manufacturing Company, with whom he remained until August 15, 1901, passing in the interval, by successive promotions, through the various positions of office boy, order clerk, cost clerk, buyer, assistant bookkeeper, cashier and salesman.

Mr. Tyler, of the firm, is Mr. Theodore R. Tyler, formerly of Virginia. The new firm handle and design machinery for grain elevators, malt houses,



CLAUDE D. STEPHENS.

flour mills, starch factories, including elevating and conveying machinery, as well as for power plants and for power-transmission systems.

ST. LOUIS WEIGHTS.

The Merchants' Exchange of St. Louis on September 23 adopted an amendment to Section 10, Rule 4 of the Rules and Regulations, as follows:

Sec. 10. It shall be in the power of the board of directors, from time to time, to appoint inspectors of, and establish a standard of grades for flour, grain, provisions, seeds, or any other article of produce or traffic commonly dealt in by members of this exchange; and the certificate of any inspector, appointed by the board of directors, as to the quality of any such article, or his brand or mark upon it, or upon any package containing such article, shall be evidence between buyer and seller, and shall be binding upon the members of this Exchange, whether such inspection shall be made in the city of St. Louis, or at any elevator, warehouse or depot on the east side of the river in East St. Louis, Ill., and contiguous thereto, except that parties shall have the right to apply to the proper committees appointed under the rules and have the same corrected, and the same may be corrected and relief given by said committees. The board of directors shall appoint committees on grain, flour, provisions, seed and hay inspection, to whom shall be referred all cases of complaint against any inspector on account of the inspection of any lot of grain, flour, provisions, hay, seed and other articles, and the decision of such committee shall be final and binding.

By this amendment the Exchange solves the problem forced upon it by the grain dealers' associations at the meeting of February last, since by it the board of directors of the Exchange is fully authorized and empowered to establish and maintain a department of weights under such rules, regulations and conditions as the board may deem necessary and proper; the purpose and intent being

to secure the accurate and correct weighing and methods of weighing of all property handled by members of the Merchants' Exchange and others requesting the service.

CARE AND CORRECTION OF SCALES.

[A paper read by H. A. Foss, weighmaster of the Chicago Board of Trade, at the annual meeting of the Grain Dealers' National Association, at Des Moines, Ia., on October 3, 1901.]

SUGGESTIONS CONCERNING THE CARE AND CORRECTION OF SCALES; A METHOD OF ESTIMATING GRAIN IN CARLOADS; COOPERING AND LOADING OF CARS.

It is the proper function of such an office as that of Board of Trade weighmaster to secure justice and equity between grain shippers, the lines of transportation and the receivers of grain.

Most of the discrepancies and the ill feeling therefrom resultant are due to three causes: First, the variation of weights given by unreliable and ill-cared-for scales; second, the waste which comes from careless loading and unloading; third, from unserviceable and decrepit cars.

With the hope of aiding, though in a small measure, in the corrections of these evils of the trade, I respectfully submit the following suggestions, which are based on long experience and careful observation, and which I trust will be made clear by the few halftones appended to the report. Those showing defective cars were taken by one man, who in a short time covered but a portion of the cars found in one yard, and can by no means convey a correct idea of what might be shown by a more complete exhibit.

SCALES.—It is but trite and commonplace to say that weighing scales are among the most delicate of mechanical appliances, and that accordingly they require the greatest care and attention.

By the mere theory of the lever, the errors are vastly multiplied, and slight variations in the standard weights are ruinous to all computations. And still, though we may grant the honest intention of those who record their verdicts, we find an inconceivable ignorance of their mechanism and an inexcusable carelessness in their maintenance. Scales are probably as much abused as the much-talked-of and long-suffering farm machinery.

Once in place, they are supposed to take care of themselves, for their errors are not evident as those in a neglected clock, nor do they balk as does the broken-down mower or harvester.

In the grain trade, we must recognize three sorts of weighing appliances—wagon scales, used by country buyers; track scales, for weighing carloads, and hopper scales, found in elevators.

Each of these devices needs special knowledge and care in both installation and maintenance.

I hope to point out some of the technical points where defects most frequently show themselves, and to designate what may be done in the way of prevention and remedy.

Rust.—To take up first of all the most general diseases of scales, I would state without hesitation that it is rust. Wagon and track scales, besides the necessary exposure to the air, have in addition pits beneath, which are hard to keep dry even with good care, and without it are simply muck holes. Such pits not only tend to rot out the scale foundation, but are continuing sources of vapors that rust the bearings and all the iron portions of the mechanism, and not only injure the accuracy of the mechanism, but curtail its life of usefulness. Rust is no respecter of quality, and the output of the high-priced and standard makers is ruined as soon as the cheaper and less accurate makes.

Drainage.—Wagon scales are frequently located at the lower end of an incline where there is natural drainage into the pit. This should be most carefully prevented by an open trench, shallow enough to permit wagons to run over it. Moreover, the pit should have an adequate outlet at the bottom for such water as unavoidably runs into it. Either in the platform or adjoining it there should be a manhole to permit the clearing of any accumulation that might harbor moisture or interfere with

the workings of the parts. Snow and ice are particularly troublesome.

Platforms.—Platforms should be kept as clean as possible and should have not less than one-half inch clearance all around. Such clearance must be watched with special care at times when frost expands and crowds in the surrounding soil, and tends to displace the outside frame. This clear space must always be kept open.

Track Scales.—All that has been said in reference to the pits and platforms of wagon scales applies with equal force to track scales. In addition, I would call your attention to the fact that on track scales the rails must not project over the platform, and must be clear of the outside rails. Where a dead rail is in use the rods which connect and hold together the platform rails should be carefully looked after. There is much danger of these rods binding or resting on the dead rail timbers when there is a load on the scales, though they may be free when the scales are empty or partly loaded, consequently careful examinations should be frequently made when the scales are loaded, to be sure that they do not rest or bind. Engines should not be allowed to run over the rails of any scales, as such extra weight weakens the foundation and throws the scales out of level.

Hopper Scales.—Hopper scales are generally located high and dry, and are consequently not subject to the moisture nor the wear and tear that threaten wagon and track scales. They are less liable to get out of order, but they, too, suffer seriously from neglect, as does all high-grade machinery. To insure correct weights, they must be kept perfectly level, and frequently inspected with care, to make sure of this condition. The hopper must be clear of all obstructions; the revolving spout, which in many cases is fastened to the bottom of it, should be so arranged that it can be turned into any spot without striking or resting thereon. If the top of the hopper is lined with canvas, care should be taken to have it loose. The slides of the scale should also be kept in good repair and the rods connecting them with the scale levers should be stiff and strong. A weak rod is liable to bend, permitting the locking of the slide lever when the slide is not properly closed. A leak at this point is often the cause of serious discrepancies in weights.

Hanger Weights.—The multiple of scales is very large, therefore it is imperative that the hanger weights be kept in perfect condition. Rusty or worn weights should be sent to the maker to be resealed. If sent to us we will gladly seal them for you, without charge, as we are equipped with all necessary devices for testing and sealing.

Checks.—Many wagon, track and hopper scales have what are called "checks," consisting of iron rods with loops at each end. The object of these "checks" is to retain the bearings directly over each other and still allow the scales to oscillate and hang plumb. They should be kept loose at all times.

Steelyard Rods.—All scales are provided with what is called a steelyard rod. This rod connects the beam with the levers of the scales, and should have plenty of clearing where it passes through the floor. Sometimes the beam is connected with a shelf lever by means of a short rod or hook, which should have sufficient play at the shelf to prevent its binding.

Compound Notched Beams.—Our experience with compound beams is such that we cannot recommend their use on hopper scales, although hopper scales are sometimes equipped with them. The graduation in the notches of these beams is often as great as three-eighths of an inch to one thousand pounds; therefore, a little dirt or a particle of grain in one of the notches will keep the poise from properly setting down where it belongs. Such a trifling cause may make a difference of several hundred pounds in the reading, which shows plainly the extra necessity for keeping the notches of such beams clean.

Foundations.—Scales resting upon weak foundations cannot be depended upon. They will give or settle with a load, throwing the scale out of level. Wooden foundations should not be placed under

track or wagon scales, but stone or cement should always be used. Bear in mind that no scale can be accurate or serviceable without a solid and well-maintained foundation. It is not an exaggeration to say that ninety per cent of the trouble with wagon and track scales arises from bad foundations.

Testing.—All scales should be tested as often as possible, and at least twice during the busy season by a proficient scale man, and with sufficient test weights. The larger the scales the more test weights are needed. When scales are out of adjustment it means that the multiple is no longer correct. If scales give an error of 2 pounds on 1,000 pounds, on 4,000 pounds it would amount to 8 pounds, on 40,000 pounds there would be an error of 80 pounds, increasing in like ratio. The larger the scales the more it takes to turn the beam and the more difficult it is to see the variation with any given weight. For this reason it is necessary to test large scales with more weights in order to obtain accuracy. Four-ton scales should be tested with not less than 1,000 pounds of weights, while on track and large hopper scales at least 4,000 pounds should be used. These tests should be made both when the scales are empty and when they are loaded. A graduated test is the surest way to test large hopper scales. Such test is made when they are empty and when loaded with various amounts until their full capacity is reached, putting on and taking off the test weights each time.

Suggestions to Weighman.—First carefully examine the scales to see that the working parts are free from all obstructions, and that they are properly balanced. If wagon or truck scales, examine and see that they are clear both light and loaded, that the pits and platforms are clean, and the rails (if any) do not bind. In case the scales have dead rails see that the rods connecting the scale platform are perfectly free; then try the working of the beam and see how much it will take to turn it from a center balance to the top or bottom of the trig-loop (sometimes called hanger-loop) when there is a heavy load on the scales. This is done by moving the poise backward or forward, making note of how many pounds it takes to turn the beam to the top or bottom. In case it takes an excessive amount the cause should be sought at once and all the various points I have heretofore mentioned should be carefully inspected.

Coopering of Cars.—Less than 30 per cent of grain shippers have an accurate knowledge of the amounts of grain loaded into cars, owing to the lack of the expensive machinery needed to secure such weights; they are therefore unable to determine or adjust their loss from leakage, whether due to the rare cause of accidents or to the common one of defective or poorly coopered cars. This brings to our attention the prime need of care in loading and coopering by the shipper, of his insistence that the railway companies shall do their part in furnishing substantial cars with adequate doors and linings. Such leakages as take place are usually discovered and repaired by railway employees, and though the shrinkage is thereby stopped, this prevention of further waste incidentally covers up the waste that has already occurred and the receiver or owner has no clue of what has happened. Even where leakage is determined and shown to be the fault of the carrier, all settlements for loss in transit are subject to auditing and red tape, which, however necessary, works hardship to the shipper, and the case is plainly one where prevention is infinitely more to be relied on than cure.

Causes of Leakage.—Among the causes for shrinkage we can blame the railway companies for furnishing defective cars and cars never intended for grain. The shipper is often to blame for carelessness in loading, while receivers at destination may use or permit loose methods in taking out the grain.

Leakage in Transit.—That leakage in transit is a serious factor is proven by countless cases where accurate loading weights are taken. The simple fact that there has been an immense increase in the average earload without adequate and corresponding strengthening of grain doors is responsi-

ble for much of this. Where 30,000 pounds was formerly considered a large load, the average load of all grain for 1900 was about 1,062 bushels, or nearly 60,000 pounds. We have had cars carrying over 100,000 pounds, and every day we find them loaded to from 15 to 30 per cent beyond their intended capacity. We had one instance where a 50,000-pound capacity car was loaded with oats up to 20 per cent more than double its intended capacity; and another where an 80,000-pound capacity car contained 112,360 pounds of corn. In such cases something is apt to give way, and the grain door, as commonly acknowledged, is the weakest point. During the year 1900, 18,810 of the cars weighed by my department arrived at elevators in a leaky condition, 6,963 of them had defective grain doors, 5,941 were leaking over the grain doors, while the leaks on the balance, or 5,906, were due to the faulty condition of the cars at other points, and you can see that decidedly the largest per cent (or about 67 per cent) of the leaks was due to defective grain doors, while this year to September 1, our records show that we have discovered 13,293 cars leaking; 4,971 had defective grain doors, 4,172 leaking over the grain doors and 4,150 were leaking elsewhere. About 68 per cent of this year's leaks is due to the grain doors. You can see by this that the percentage of grain door leaks remains about the same.

Weak Grain Doors.—Many grain doors are made of cull lumber, which is entirely too weak to withstand the pressure. Often one board in a door of this kind is much weaker than the others, and there is no way of discovering it until the car has been in transit or switched around and it springs out to such an extent as to allow grain to leak between the boards; consequently this class of doors should either be doubled or braced by sufficient cross-boards fastened to each board. Such treatment should also be applied to the additions which are built above the lower grain doors.

Bulged Doors.—Serious leaks are often caused by the patent grain doors shifting or bulging, thus causing leakage at the bottom and end. When cars are not equipped with patent grain doors, and the doors are made up entirely of single boards, they should be thick and strong enough not to bulge.

Spill Over Doors.—Where shippers have improved loading spouts, grain is often thrown high up into the ends of cars, thus leaving a depression in the center, and in boarding them up they do not extend the boards high enough above the grain at the door; the car being moved and knocked about levels the grain, consequently there is a spill over the door. Of course, many such overflows are due to inspectors and samplers, who knock off the top board or boards and fail to prevent waste thereafter.

End Windows.—Another cause for leakage is that some shippers neglect to board up the end windows, which are merely hooked or bolted, and if the grain is higher at any part of the car it will leak out of this window when it levels.

Sheathing.—There is a heavy strain at the junction of the side braces at the floor between door and end of car, frequently causing the sheathing to spring away from the side sill. A leak here is not often noticeable unless the car is jarred. If you will examine cars at this point you will find that a great many are bulged and sometimes have been repaired by driving in additional nails, consequently may leak before arriving at destination.

Linings.—When the linings of cars are not in good condition considerable grain often finds its way between them and the sheathing, where it is seldom noticed, and when it is detected it is often impossible to extricate without mutilating the cars. This is especially true where the lining extends nearly or entirely to the floor, and it is a common occurrence to find hundreds of pounds of grain here in cars that have been unloaded and apparently well cleaned out. I know of one instance where 1,800 pounds of wheat was found lodged in the linings several days after the unloading of the car. Therefore, careful attention should be given to see that linings are intact before loading. This also is true of refrigerator cars, where there is con-

siderable space under the ice boxes, where grain may lodge and not be seen. But a short time ago 1,200 pounds of wheat was discovered under the ice boxes in one of these cars.

Drawbars.—Drawbars are also factors that figure largely in leakages. Kingbolts, door posts and end posts are other points that frequently cause serious loss of grain.

Automatic Coupler.—Since the introduction of the air brake, the automatic coupler and the gravity track, cars receive somewhat rougher treatment than formerly, and a greater number of leaks is the result. With the patent coupler, there is not so much danger to switchmen, and cars are allowed to collide with much more force.

How to Load.—Be sure the cars are clean before loading, for if coal, lime, dirt or rubbish is left on the floor, considerable dirty grain will be lost at the unloading point. Carefully examine kingbolts from inside of car, and if not in good condition cover them with boards properly fastened. See that end windows are properly boarded, and that the grain doors are made of good, substantial lumber, securely fastened and braced. If patent grain doors are used, see that they are secure at the bottom on the outside to prevent bulging, and fastened so it will be impossible for them to shift, for the moment the end of a patent grain door slips beyond the door post there will be a serious leak. Have the doors boarded high enough to prevent overflows, but not too high to permit the inspector getting into the car. When cars are boarded unnecessarily high the inspector is forced to knock off the top boards to get to his work.

These suggestions are placed before you in the interest of all parties. In all the suspicion, irritation and hard talk over discrepancies in weights, there are a hundred cases of misunderstanding, carelessness and avoidable waste to one of actual theft or dishonesty in weights.

The carrier should be forced to furnish suitable cars, the shippers should load them with care, and when possible know what they have put into them. The receivers should use care in unloading.

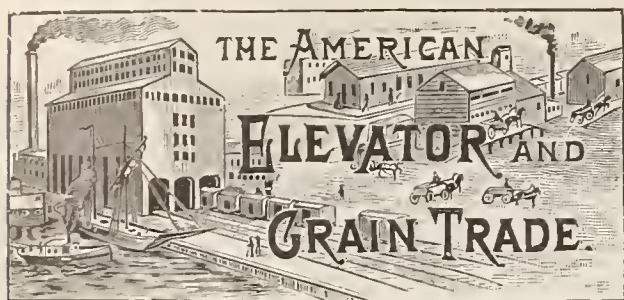
When these precautions are taken the party responsible for shrinkage can be located and proper settlement made.

KANSAS CITY HAS A CORNER.

A corner in corn at Kansas City is said to have been the result of the efforts of J. Sidney Smith of the Merchants' Elevator Company of that city, begun some two months ago, to buy all the "regular" corn in sight. When September corn was selling around 56 cents Mr. Smith bought several hundred thousand bushels. The price advanced steadily to 60 cents and then to 64½ cents, dropping back a cent at the close of the month. The corner was possible, not because of scarcity of corn in Kansas City, but because there are but three "regular" elevators there—the Union Pacific, the Santa Fe and the Crescent—and these were full of wheat and other grain, so that owners of corn in outside houses could not get their corn stored where warehouse receipts for it could be had. Mr. Smith is reported as having made about \$13,000 by his little corner.

One of the largest "shorts" was A. D. Johnson, who found it impossible to get his grain into the "regular" warehouses for grading out. Mr. Johnson made application to the directors of the Kansas City Board of Trade Clearing House to have his margins and those of Mr. Smith transferred to the possession of the secretary of the Board, so that the question of differences might be settled by the arbitration committee. This the Board refused to do, and Mr. Johnson can either let his September contracts stand open or else tender Mr. Smith bills of lading for corn on track and force him to go before the arbitration committee if he refuses to accept the tender.

Ex-Governor M. C. Moore of Walla Walla, Wash., urges that the markets of that state shall quote wheat by the cental, as is done in San Francisco, instead of by the bushel, as is the present custom in the Sound markets.



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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., OCTOBER 15, 1901.

Official Paper of the Illinois Grain Dealers' Association.

ACTIONS AGAINST THE KANSAS ASSOCIATION AS A TRUST.

During the past thirty days two cases involving the Kansas Grain Dealers' Association in the character of an alleged trust have been heard by the courts of that state. The first inquisition took place at Hutchinson on September 20, when the District Court heard the case brought by the Haven Elevator Company, a farmers' organization at Haven. The charge was that the Association, represented in the person of E. J. Smiley, secretary, had conspired with receivers and transportation companies to make it impossible for said elevator company to transact business, although equipped to do so. A large number of witnesses was called, but when Mr. Smiley, who was the first put on the witness stand, refused to testify, the other witnesses were excused, and by agreement he was committed for contempt of court, upon which commitment an appeal was taken to the Supreme Court, where the constitutionality of the act authorizing investigations under the trust law of Kansas will be tested.

In Rush County, however, on October 4, Mr. Smiley did not fare quite so well. The information, sworn to by one Henry Ahrens of Bison, charged that Mr. Smiley had entered into an agreement, contract and combination with grain dealers at Bison, Rush County, to buy wheat on a three-cent margin and pool the business, divide the earnings and prevent competition. On this charge Mr. Smiley was found guilty, a motion for change of venue on ground of prejudice having been previously overruled. He was fined \$500 and committed to jail for three months, the local Dogberry who heard the case refusing,

in the first instance, to allow any appeal! He subsequently relented under mandamus, and graciously permitted Mr. Smiley to give bail and to file an appeal to the Supreme Court, which meets during next November.

Presumably Mr. Smiley will now be given a rest until the case can be heard by a court of final jurisdiction on its merits. By that time most likely the entire so-called coöperative movement will have died out of Rush and Reno counties, as it has, so far as we can learn, in the few other parts of the state of Kansas where it ever had any foothold.

THE NATIONAL ASSOCIATION.

The sixth annual meeting of the Grain Dealers' National Association, fully reported in this number of the "American Elevator and Grain Trade," has placed the Association, for the first time in its history, on a national plane. How far the generosity of the railways contributed to this fortunate consummation need not be computed. It is enough that the Association at the Des Moines meeting "arrived," and for the future it must, without doubt, be reckoned as a positive factor in the trade.

In the first place, it has elected a secretary who will have a permanent headquarters and will give his entire time to the Association's business. Mr. Stibbens, although nominally the second choice of the board of directors, was not so in fact; since the compliment of the reelection of Mr. Clark was thoroughly understood, as, in the opinion of the directory, it was merited. Nevertheless, Mr. Stibbens is strictly the logical secretary. It is doing no injustice to anyone to say that to Mr. Stibbens no less credit is due for the growth of the National Association during 1901 than to any one man. Mr. Stibbens has always been a National Association man, even before his own Southwestern Iowa Union agreed with him. A man of definite purposes, however, he stood by his text in his own territory, until at length, with the aid of his able colleague, President D. Hunter, he brought his own people to the point of affiliation. That was the true "psychological moment" of the National Association. For Mr. Stibbens then came to Illinois; his reasoning was convincing; the Illinois Association voted affiliation, and the Des Moines meeting was the result.

Two matters of legislation of prime importance were enacted at Des Moines. One was the establishment of a system of arbitration that promises in due time to be of great benefit to the trade. It must not be expected to render the courts obsolete at once; it will require time to develop its value. But it is a long step toward the settling of misunderstandings by a rational method at a minimum of expense.

The same may be said of the trade rules adopted. As Mr. Chambers said on behalf of the arbitration scheme, so, too, Mr. Burks said for the trade rules—they are not claimed to be perfect or to cover every point that might have been provided for, but they are simple; they cover fundamentals, and receivers should encourage shippers to adopt them as far as they go and as speedily as possible. Neither the trade rules nor the arbitration rules will execute themselves; they will need friendly urging before they will receive universal or even general

recognition. But their adoption is a step forward, and as such the new rules, which are not far different from the practice now of careful and conscientious traders, merit the consideration of the shippers and receivers.

These considerations alone are sufficient to make the Des Moines convention epochal and to point to great things in the future of the National Association.

MEMPHIS AS A GRAIN MARKET.

There is a lingering suspicion in some minds that Robert L. Kellar's description of the Tennessee farm, with its lush mint patch and the little stillhouse under the shade of the hill, had more to do with the overwhelming vote for Memphis as the next convention city of the Grain Dealers' National Association than the actual status of Memphis as a grain market. Yet Memphis has eleven elevators in operation, two of them new this season, and while they are comparatively small, of course, they are transfer houses that are kept pretty busy handling grain, the bulk of which comes in over the Frisco and Choctaw lines for distribution into the Southeast.

While to the bulk of the grain men interested in the National Association the southeastern trade is of little moment, and the benefits that might result from holding a national meeting in that territory seem problematical in the extreme, it must be confessed that in no section of the country do the grain dealers need education more than in the Southeast. But the objection to this method is that they need education of so many different kinds down there that life is pretty short to work it out by holding national conventions in that country.

MORE COÖPERATIVE FAILURES.

The Coöperative Grain Association of Kansas is putting up a very good bluff, and some skillfully written articles have brought it to the quite unmerited attention of even such eastern journals as the Outlook, which, on the strength of an anonymous article from Solomon to the Omaha Bee, joins in Mr. Butler's wholesale condemnation in the Kansas Farmer of the regular grain dealers of that state as a confederated band of grafters, or words to that effect. Yet the Outlook also laboriously condemns the "yellow journals," with their reckless defamation of character, as the fathers of anarchy.

It is a very old saying, coming from the very highest authority, that "by their fruits ye shall know them." It is a little early, therefore, to exploit the Coöperative Grain Association of Kansas as a success, seeing that the seed thereof is as yet barely showing above ground. Wait awhile—at least until it shall have weathered a storm or two.

In the Northwest, on the other hand, where coöperation is by no means a new theory, it is the exception when farmers' grain shipping associations have continued to do business after one or two seasons. Failures there are, in fact, quite as common as the formation of new coöperative companies. In September the Farmers' Elevator Association of Sletten, Minn., found that \$7,000 had been lost in one year's business, which would have to be contributed to

save the elevator—a fate similar to that of the coöperative elevators at Fosston, Shelley and Warren. At Belgrade, Minn., the farmers, in September, by a vote of 36 to 19, voted to sell their elevator to a Minneapolis line company, for, although it was asserted that the management was “prudent,” yet the elevator lost money continually. At McIntosh, Minn., in September, the farmers’ elevator was closed, with liabilities of \$7,331 and only nominal assets. At Cokato, Minn., the annual report of the farmers’ company showed a net loss of \$316.57 on a business of \$53,053.62. At Sauk Center, Minn., the failure previously reported here has been supplemented by a legal contest to determine who shall pay the debts over and above what the elevator property sold for. At Royalton, Minn., the farmers’ company has begun suit against a Minneapolis commission house to recover \$2,500, claimed to have been lost by the option deals of its agent—pleading the “baby act,” of course.

Now, to be sure, this sort of thing does not represent the typical fate of every coöperative company, but it is so nearly the universal truth that it makes any attempt to glorify the coöperative grain buying system, as something in the nature of what the editorial elegant of the Record-Herald calls “applying business principles as old as the first bargaining or bartering done by man,” sound like unmitigated twaddle.

As has been said before in these columns, the Kansas dealers must be patient and not lose their self-control. The Butler craze is exceedingly local now; it will be the exception to the rule if it be more than a flyspeck a year hence, unless rattled Kansas City commission men give it a new lease of life.

MR. PEAVEY'S ADDRESS.

The paper read by Mr. F. H. Peavey at the Des Moines convention was a notable contribution to the literature of the grain trade. Permeated by a fine literary style, it was also as interesting historically as it was valuable from the standpoint of trade economics. As a reply, although, of course, not so intended, to that soggy class of thinkers who put the grain dealer in the category of parasites of the farmer and the grain consumer, it was final, showing, as it did, by its review of the history of the grain trade of the Northwest, the enormous service the grain dealer has rendered for the development of that part of our country by opening up markets, even in advance of the railways, and in being the prime cause of a reduction of the handling charges between the farmer and the ultimate consumer.

The grain dealer has no need to apologize for his existence, as certain Kansas City commission men are now apologizing for themselves, under the spur of the prod they got at Des Moines and the tremor superinduced by Mr. Smiley's recent experience at Haven and the building of half a dozen insignificant farmers' warehouses in far western Kansas. No; as both Mr. Peavey and Mr. McCaull pointed out, the economic place of the grain dealer is an honorable and necessary one. What is more, the grain dealer who is such, and not a mere speculator, or gambler using grain as counters, who attends as closely to the details of his legitimate business as does a successful mer-

chant or manufacturer, invariably makes a living at least, and may accumulate a fortune. Mr. Peavey is himself a living example of the grain merchant; Mr. Lockwood of the National Association is another.

In no business is success so sure as in handling grain strictly on business principles, and this is so because wherever there are farms there are needed the services of the grain dealer to collect the small lots of grain from the farmers and assemble them in terminal elevators, to be held until called for by consumption. This is a substantial service to the world, and as such it commands its proper reward.

MR. FOSS ON COOPERING CARS.

It was a characteristic saying of Thomas Carlyle that “mankind is as lazy as it dare be.” Had he been a weigher of grain at a terminal market, he might have maintained the proposition by showing that many country grain dealers do not put enough study on the shipping of grain to really know how to prevent the losses in transit and the consequent short weights which are due to themselves and themselves alone. They are like the Missouri rustic who has to be “shown.”

Mr. H. A. Foss, Chicago Board of Trade weighmaster, has printed for the benefit of all such a little book entitled “Suggestions concerning the care and correction of scales; a method of estimating grain in carloads; coopering and loading of cars.” The text of this pamphlet, which has grown out of his wide experience, is reproduced on another page of this number, but the book itself is illustrated by eight full-page engravings of scale settings and housings designed to show in graphic form the details of scale construction referred to in the text, and also of no less than seventeen different types of defective and badly coopered cars. The pamphlet covers, in short, the whole theory of short weights, based on natural causes, and taken in its combined graphic and textual forms is a complete text-book, the careful study of which, with its application in practice, will solve the greater part of the short weight nuisance and save country shippers literally thousands of dollars. An edition of a few thousand copies of this unique work has been printed and copies will be sent free to shippers on application to Mr. Foss, so long as they last.

It is only fair to Mr. Foss to remind shippers that this exceptional service to them is one entirely outside the reasonable lines of his professional duty, and one that he has rendered the public at a personal cost to himself in money of at least twice what is usually understood as “several” hundred dollars. It is the free offering of an official who has gone beyond even the most captious view of his duty and has rendered a service to individual shippers of a character which has no direct bearing upon the real efficiency of his own bureau, but has reference solely to the personal benefit of the individual shipper.

The service is really unique in the strict sense of the word, and the grain trade certainly are under a weight of obligation to this ideal public official, whose reputation as such in the United States is as exalted as his personal character is admired by all who have had the privilege of coming in contact with him.

KANSAS CITY NERVE.

The Kansas City folks at the Des Moines convention were excessively in evidence in the meeting room, occupying five boxes made more conspicuous by a most elaborate display of the artistic sign writer's art. The delegation seems to have left home impressed with the notion that the National Association was about to hold a mass meeting, and, to an old association man—like ex-President Tanner of Illinois, for example—the tentative movement to capture the next convention had just the appearance, on the surface, of “nerve.” The Kansas City Board of Trade should, indeed, take the Association's hint and get into line. No one wants to say to her people, “Go 'way back and sit down,” but a board rule that prohibits its members from becoming members of any association of grain dealers is in these days an offensive anachronism. Besides, it isn't dignified. The rule was unblushingly adopted to save the commission houses about \$50 per annum each in association dues, which is hardly consistent with the brilliant Des Moines sign, “The greatest primary winter wheat market in the world.” In next year's convention Kansas City should be represented by members as well as by rooters.

But Kansas City Commission men are not likely to join hands with the National Association, if we are to believe interviews in the Kansas City Journal of October 5. The Des Moines resolution had evidently miffed the Kansas City folks, and the morning after their delegation got home a director of the Board is quoted as saying that—

If we let the bars down to enable members to join the National, then they will be obliged to go into that confounded Kansas Grain Dealers' Association and every other kind of an association. We adopted the exclusion rule for the precise purpose of heading off any such movement as they sprung in Des Moines, and the rule is so satisfactory that I am confident it will not be abrogated. The Kansas Association is in enough trouble right now to make us vote to kill the Des Moines resolutions.

And how does this “trouble” affect Kansas City men? Why in this way:

The Kansas City commission men have all they can do to keep on the good side of the grain growers without taking on memberships in the Kansas Grain Dealers' Association, which is so unpopular with the growers.

Then another man afflicted with too limber a tongue goes on to relieve his nervous tension by referring, tearfully, to the Haven episode, concluding with:

So you see from this that we are not going to adopt the Des Moines resolutions when we see right to-day in what a mess we would be plunged.

And this is twentieth century nerve in the Great Southwest—to be bluffed out of countenance by the bluster of two out-of-date populists! Kansas City ought to imitate Milwaukee—confine its attention as far as possible to wind, and then the populists wouldn't make any difference.

Manitoba farmers are declared to be as happy as farmers can be expected to be, for the law requires the elevator man to take out a dealer's license and to give bond conditioned on the performance of his contracts. Qy.—Does the farmer also give bond that he will keep his contract if the price goes up?

EDITORIAL MENTION

The State Board of Equalization of Minnesota has advanced the assessment on elevators to 10 per cent higher than last year. Next year it will take the shingles, too, perhaps.

Secretary McCord of Ohio reports his association as increasing in membership, and in a healthy financial condition. The regular fall meeting will take place on October 24.

That lively local association, the Illinois Valley Grain Dealers, will meet at Streator on October 31 for a business session. The green badge of this association was quite in evidence at Des Moines.

The article by Mr. Stritmatter, on another page, on the troubles usually experienced with the gasoline engine at this time of year, will be found especially useful to owners of that generally admirable machine.

Why is it, the Omaha World-Herald rises to remark, that a prominent railroad official classed Omaha as a grain market as "only a whistling station?" The W.-H. has its own answer, but Peoria might suggest a better one.

An opportunity is offered to the holders of the mammoth piles of corn cobs to realize on this by-product, an advertiser in the September number of this paper asking for bids on cobs delivered at Sandusky or Cincinnati.

The waterways convention held at Baltimore was attended by over 200 delegates from twenty-five cities. It urged more liberal appropriations for river and harbor improvements and the construction of the isthmian canal.

One of the hay trade papers copies, as its own report, the "American Elevator and Grain Trade's" report last month of the National Hay Association's annual convention, and without credit. If "imitation is sincerest flattery," what is this?

The Kansas City Board of Trade, having been called on to discipline a member charged with dividing commissions with a customer, the Butler-Bucklin combination, or Farmers' Co-operative Association, now proposes to start a board of trade of its own, that Association being the customer complained of. It doesn't appear as yet, however, that seats on the Kansas City Board are going begging.

There will likely be considerable disappointment with the inspection of this year's corn, unless country buyers are very careful in their own grading, for Iowa corn at least is very spotted. Even the same wagonload will show kernels that are hard and dry and marketable as No. 2, and also kernels so soft that a toothpick can be pushed through them without difficulty. There is also a very large proportion of shriveled

grain. Keep your eyes open and don't be too liberal with your own buying inspection. It won't pay.

Eastern grain exporters, according to the eastern press, are complaining of a car famine, but eastern roads at the Chicago end find fault with the largely decreased shipments, "disappointing" business and low rates. They ought to "get together."

Milwaukee "points with pride" to an increase of 954.7 per cent in the business of her Chamber of Commerce—all of which is transacted during the regular hours and does not pay the bucketshop tax. How small is the percentage representing Wisconsin zephyrs?

The first apparent result of the Des Moines convention is the statement by President C. E. Wenzel that the Northwestern Grain Dealers' Association, with a large membership, will probably be affiliated with the National Association before the next convention.

The Orange Judd Farmer is doing its level best to bull wheat and proves by unassailable statistics that dollar wheat at least is now due. And yet in the face of the lowest ocean rates on record, California millers declare "there is too much wheat in the world." What is the matter?

No feature of the "American Elevator and Grain Trade" is of more practical value than the department of "Court Decisions." It is also an exclusive feature, this being the only trade paper making a specialty of decisions of courts of last resort on questions of daily interest to the grain dealer.

The Decatur grain dealers have formed an organization called the Decatur Merchants' Exchange, which has been incorporated under state law. It includes all the firms handling grain at that point, and will, by an arrangement with the Decatur Review Publishing Company, be housed in that company's building. It expected that sooner or later all the grain firms of the city will also have offices in the same building.

The League of Trade Associations has resumed its work for the amendment of the Interstate Commerce Law, beginning its public campaign by sending to Washington a delegation headed by E. P. Bacon of Milwaukee, chairman of the League, to personally bring the subject to the attention of President Roosevelt. The specific character of the discriminations made by the railways, in favor of raw materials especially, was dwelt upon.

State Grain Inspector B. J. Northrup of Kansas may be a good inspector, but up at this end of the world he would hardly do as a shining example to the rest of the governor's machine of what a loyal employe should be. He actually replies to the state auditor's notification to keep his office expenses within the appropriation by saying that while there are, of course, more men on the payroll than are needed at this time, yet "the governor is the

boss—tell him." Governors with a machine like this kind of loyalty, to be sure, but they generally prefer not to have the facts circulated by a newspaper or the town crier.

Both the National Hay and the Grain Dealers' National Associations have indorsed by resolution the plan proposed by Mr. H. S. Grimes for improving the government crop reports. It is up to Congress now to make the necessary appropriation on recommendation of the Agricultural Department. Will Secretary Wilson take the hint?

The Mexican government has suspended the import duty on corn until October 31 next, owing to shortage in the crops, and it is proposed to give further relief by authorizing the president to buy corn for distribution to the poor until next April. As corn and beans are the chief foods of the peons, a failure of the corn crop becomes a real calamity in Mexico.

The Farmers' National Congress at Sioux Falls memorialized Congress on October 2 in favor of an isthmian canal. This is undoubtedly in line with American public opinion, but one wonders if the farmers appreciate the fact that the most valuable service the canal will render Americans is to cut down the overland rates on agricultural products from our Pacific Coast to the Eastern states.

Ocean freights are and for some time past have been abnormally low—1½ cents to 2 cents per bushel, and flour at 5 cents per 100 pounds to London and Liverpool, and cargoes hard to get even at that price. Shipowners profess to see, moreover, no improvement for the immediate future. With bottoms begging for freight at these phenomenal rates, the urgent necessity for ship subsidies is not so apparent to shippers as to the beneficiaries of the bounty.

The hearing of testimony in the case of the National Hay Association against the Lake Shore and other railway companies in relation to the matter of the hay and straw classification, set for October 3 at Buffalo, has been postponed to November 6 by the Commerce Commission. This case is very important to the hay trade, and John B. Daish, chief of counsel, has it so well in hand he hopes to have the old classification restored. The matter of discrimination in favor of Canadian hay to New England points is another complication that will receive attention as soon as the hearing is had.

The propaganda against purified barley and other grain, as the newspapers seem to have found out, made a bit of a sensation in committee room at Des Moines, with a set of resolutions condemning "sulphuring." The resolutions were not approved by the committee, however, although some preliminary cultivation of public opinion had been attempted in some of the markets. It would appear that there is a distinct tendency to put in the purifying apparatus, especially among country dealers, who are charged, by the Peoria press at least, with working over dirty oats. Now, without going into the merits of the process, it might not be im-

pertinent to say that the campaign against the purifier is not likely to win out by passing resolutions. The courts have already decided in Illinois that the process is rather a benefit than a damage to the grain, and, therefore, to the public also. Its use being thus judicially declared lawful, resolutions are not likely to interfere with it. Rather, it is "up to" its opponents to show that the public, not merely individuals, is damaged by its use.

The proposals of the German agrarians to increase the minimum duties on cereals has brought the tariff question to a crisis in the empire and the old "corn law" discussion heard for many successive years in Great Britain is being rethrashed, with great bitterness on both sides. For the first time in the history of the German grain tariff, which has been steadily increasing its burdens on cereal consumers for nearly thirty years, the industrial classes are now making a determined fight against any further advance. In fact, at the wages paid to miners, common laborers and many trades workers, any further increase would mean starvation, especially at this time, when all the world is preparing itself against a vast financial crisis there and a far-reaching collapse of the industries of the nation.

A decision on the Illinois statute prohibiting "puts and calls" trading, involved in the A. V. Booth case, is expected from the United States Supreme Court at the next session of the court, beginning on October 23. Should the statute be sustained, privilege trading would, of course, continue to be illegal in Illinois. Should it be declared unconstitutional, however, there might be a quick slump in the value of memberships in the Milwaukee exchange. In the absence of privilege trading at Chicago puts and calls form a large part of the business transacted at both Milwaukee and Minneapolis, whose exchanges permit such deals in regular business hours, thus avoiding the incubus of the double tax on a "bucketshop" transaction, which falls on such trades at other exchanges not permitting that form of trading on the floor within the regular hours.

Judge Neely, at Chicago, has hurled a bombshell of a new kind at the Board of Trade. It takes the form of a temporary injunction, issued on a petition of Murry Nelson, to restrain N. E. Wheaton from using his membership. With all due respect this seems like an abuse of the injunction power. In the first place, it is an invasion of the right of a chartered company to govern itself and its members, under rules authorized by its charter, through its own board of directors, and, in the second place, admission of the court's right to thus interfere with members' use of their membership privileges might lead to such abuses as to make trading unusually hazardous and wholly within the caprice of tricky members and susceptible judges, to whom such representations might be made as would lead to prohibitions of members' use of their privileges at critical moments, with most disastrous financial results. Injunctions, as we understand the spirit of the law, were designed to be used only to prevent acts for which there would be no adequate remedy at law; where this exists the

injunction ought not to lie, being unnecessary, and therefore unwarranted.

The grain inspection department of Minnesota was thoroughly "reformed" some weeks since by a "clean sweep" of all the many populist employes who held down jobs under the late administration. It is a queer commentary on the system of rotation in office, however, that one of the new employes had so little conception of the sanctity of a car seal that he was practically found guilty recently of tampering with seals and with allowing a Minneapolis receiver to withdraw samples from the cars on his own account. Investigation seemed to make it clear that no collusion had existed and that the employe had no wrongful intention in the matter. He was, therefore, reinstated on his "excellent record," after having had, presumably, some strong light let into his pate on the subject of car seals and what they are generally used for. Queer, isn't it, that a man with sense enough to inspect grain should have to be jogged up on such fundamental principles as the meaning of a car seal?

Delegate S. S. Tanner of Illinois did well to remind the aspirants for the honor of entertaining the Grain Dealers' National Association in 1902 that Des Moines had set a very rapid pace, which it would be difficult to equal. Not only was the convenience of the convention itself admirably provided for, but every detail for the personal comfort of the guests of the city had been anticipated. Where visitors were unable to find accommodations to their liking at the numerous hotels, admirable private rooms were provided when desired. Then the committees of the Des Moines Cereal Club were ubiquitous, vying with those of the Commercial Exchange in looking to the comfort and convenience of all. Even those usually unsatisfactory features—a trolley ride for a crowd and the social entertainment of six to eight hundred men at luncheon—were carried out as planned, without disorder or the slightest unpleasant friction or discomfort. It is due to the Association's hosts at Des Moines to say that those taking part in the meeting, to a man, returned home carrying with them the most pleasant recollections of Des Moines and her people.

Shippers to Galveston having entered the stereotyped complaint of short weights at that market, John E. Bailey of the Galveston Wharf Company requested Chief Inspector C. McD. Robinson to note specially the condition of cars arriving. The inquiry disclosed the fact that during July and August not less than 60 per cent of the cars came in with leaking doors. Reports of this fact to shippers cut down the number materially; nevertheless, it appears that about 30 per cent of the cars still arrive in that condition. This state of affairs can be duplicated at probably every terminal market in the country, and its universality justifies that "tired feeling" which comes over weighmen when shortage is claimed nowadays. Indeed, it may even be not unfair, in view of these facts, to shift the burden of proof to the shipper and make him show, first, that he has started his cars in good condition before investigation is made at the terminal. It is possible that the

weighman at the receiving terminal may be as accurate and as honest as the man who loads grain without taking proper precautions to prevent leaks, assuming, as he should in every case, that the cars will have the hardest possible usage en route.

More defalcations of line agents are reported from the Northwest. In one typical case the agent, at the munificent wage of \$40 per month, bought a controlling interest in a billiard hall, acquired title to a house and lot and made his neighbors envious by his fine horses. Yet he managed to get out of the country before his employers "caught on." In another case the auditor is hunting up the shortage among the farmers. In a third case the entire line's agents stand by their guns and refuse to make good the shortages which are charged up against practically all of them. Of course, this is a matter in which the trade are not so much interested as the parties, and while it is presumptuous to tender advice, it might be suggested that more frequent "cut-offs" by the auditors would lessen the friction between agents and companies.

The practice of thrashing wheat directly from the binder has been attended with such poor results in Manitoba, both last season and this, that the Winnipeg line elevators have brought the issue to a crisis by deciding (on September 26) to stop buying for the time being. This, it is expected, will force those farmers who have no granaries to stop thrashing until the grain shall have cured in the shock. This is a drastic step on the part of the buyers, perhaps, but in view of the fact that the damp grain coming in has already overtaxed the capacity of the terminal driers, it would seem to be a wise one. The building of rainproof stacks for wheat and the curing of the grain prior to shipping is entirely practicable and would be a positive benefit to all concerned, but the tendency to throw this duty upon the elevator is so strong that probably only arbitrary methods will be able to put a stop to its abuse.

On September 23 the St. Louis Merchants' Exchange, by a vote of 322 for and 15 against, adopted a rule (Sec. 10, Rule 4) authorizing and empowering the board of directors of that Exchange to "establish and maintain a department of weights;" that is to say, to take charge of the entire system of weighing public grain in that market. Thus has St. Louis redeemed herself from the obloquy that had attached to her system of weighing public grain, which was about as bad as bad could be. Of course, the charge of dishonesty was an unfair one to make, except in so far as the market's universal neglect of and indifference to its obsolete and wasteful methods were responsible for results which to the shippers amounted to the same as deliberate robbery, since their loss was the gain of individual St. Louis receivers, whether they planned to get the gain or not. St. Louis, too, labored under the disadvantage of a municipal weighing bureaucracy, with all its attendant evils of political pulls and placeholders. It has thrown off both incubi now, and there is every reason to believe that the weights in that market will be fair and square hereafter. So much for a "prod" in good faith.

Trade Notes

A factory is to be located at Dubuque, Iowa, for the manufacture of grain bags from cotton and flax tow.

The Barnard & Leas Manufacturing Company of Moline, Ill., are now represented at Portland, Ore., by C. J. Groat.

The Marseilles Mfg. Co., Marseilles, Ill., are exhibiting their hand and power corn shellers at the Peoria Corn Exposition.

The plant of the Dodge Manufacturing Company, Mishawaka, Ind., is so rushed with orders that a night force will probably be put out. They have a new foundry and machine shop nearing completion.

The N. P. Bowsher Company, South Bend, Ind., have gotten out a new catalog. It has a new cover and contains attractive half-tones of their line of feed mills. They will be pleased to mail copies to all requesting same.

Our advertisers were represented at the recent successful Indiana State Fair, at Indianapolis, as follows: N. P. Bowsher Co., South Bend, Ind.; Fairbanks, Morse & Co., Chicago; Nordyke & Marmion Co., Indianapolis; A. T. Ferrell & Co., Saginaw, Mich.

Fred H. Brown, of the Modern Warehouse Elevator Co., Colfax, Wash., was at Portland, Ore., recently. He stated that by April 1 they would have their sack elevator factory located in Portland, where they would have better advantages both in buying material and making shipments.

C. H. Booth, manager of the Kansas City branch of the Marseilles Mfg. Co., Marseilles, Ill., reports that they have supplied a great many machinery outfits for elevators in Kansas and Oklahoma, during the season now closing. The Kansas City office is located at 1413 and 1415 West Tenth Street. At the home factory the molders are now working ten hours a day instead of eight, and it is expected that other departments will have to do likewise in a short time.

Wm. H. Rose, Harry C. Reitz, Rosia W. Welch and others have incorporated at Baltimore, Md., as the Southern Rice Polishing Machine Company, to manufacture machines for cleaning cereals. Their authorized capital stock is \$50,000. The Allis-Chalmers Company, Chicago, has received a contract for eight 5,500-horsepower stationary engines for the Rapid Transit Railway Company of New York City. They will furnish the electrical power for the new underground railway.

The October number of Graphite gives the experience of a gasoline engine user with Dixon's finely flaked graphite. The man in charge of the engine allowed the lubricator to run dry, thus cutting the piston, piston rings and cylinder. The makers said the piston would have to be replaced with a new one and the cylinder rebored. He fed some of the graphite into the cylinder with the air and gas and the engine was soon running smoother and using less gas than ever before. When taken apart, the abraded surface was found to be as smooth as glass.

The H. W. Caldwell & Son Company, manufacturers of elevating, conveying and power transmitting machinery, Western Avenue, Seventeenth to Eighteenth streets, Chicago, have commenced the erection of a large three-story and basement building as an addition to their present plant. It will be remembered that their present plant is a new one, having been completed in January, 1900, but an increasing business makes it necessary to add to their already extensive facilities. The new building will give them an additional floor space of 45,000 square feet. It will be of mill construction, 70x160 feet, and is designed for use as a warehouse and for the manufacture of the sheet metal specialties which form a part of their regular trade. The addition of this building to their plant will also increase the effective working space of their

machine shop and will practically double the capacity of the plant. The building will be completed by the first of the year and the enlarged plant will be in readiness for the coming busy season.

IN THE COURTS

The Belgrade Elevator Company of Belgrade, Mont., has brought an action against Nelson Story of Belgrade to recover \$3,000, alleging that grain stored in Mr. Story's elevator was damaged. This Mr. Story denies.

H. O. Stimson has brought suit against the Great Western Elevator Company of Minneapolis to recover \$2,220 for personal injuries. He alleges that a gasoline engine in the elevator in which he was employed exploded, and that one of the fragments of the machine struck him and fractured the bones of his leg.

The Aetna Indemnity Company has sued the estate of William Clemens of Leonard, N. D., for \$1,500, the amount of a bond paid by the company on occasion of Clemens' recent suicide and defalcation. He was agent for an elevator company and lumber firm and the indemnity company paid the amount of his shortage.

George G. Mabin of Danville, Ill., has filed suit to set aside a deed to real estate in that city, which was taken by L. M. Locke, a broker, in satisfaction of a grain deal. Mr. Mabin alleges that the deed was placed in the hands of Frank Lindley and that Mr. Locke secured it from Mr. Lindley's office during his absence, and placed it on record. He asks that the deed be set aside.

In the suit of McCarthy Bros. & Co. of Duluth against the Weare Commission Company, for settlement of claims arising out of deals which matured about the time of the Northern Pacific panic, a verdict was rendered in favor of the plaintiffs for the full amount of their claim of \$5,725.37. The contention of the Weare Commission Company was that their agent, Mr. Ripley, was acting on his own account, and that the transactions were in the nature of bucket-shop deals. Against this the plaintiffs brought evidence to show that the Weare Commission Company had for several years maintained offices in Duluth and West Superior, and that these offices were in charge of Mr. Ripley as manager. The verdict exonerates Mr. Ripley of the charge of bucket-shopping.

When the Reynolds Grain Company of Port Huron, Mich., failed recently it was discovered that the banks of that city held grain receipts for \$19,646.41 more than was actually in the elevator. The receipts were issued by the Botsford Elevator Company, and the banks demanded from it an amount sufficient to cover the shortage. The majority interest in the Botsford company was quite willing to pay this amount, but the minority stockholders opposed them and secured a temporary injunction. The court, however, required them to put up a bond for \$4,000 before agreeing to continue the injunction, and as they failed so to do the injunction was dissolved. The Botsford Elevator Company then made arrangements to pay the amount of the shortage, and elected C. O. Duncan and P. H. Phillips to succeed T. R. Wright and W. F. Botsford as directors.

The National Bank of Commerce of Kansas City, Mo., has sued the Louisville & Nashville Railway Company for \$129,000. Several years ago W. R. Morrison shipped a great quantity of wheat and corn from Kansas City to Pensacola, Fla. He borrowed a large sum of money from the National Bank of Commerce for handling the grain, and secured the bank by turning over the bills of lading as collateral. The railroad did not know that the bills of lading had been pledged to the bank and refused to turn the grain over to it, but deposited it with the Pensacola Elevator Company. The bank sent W. T. Kemper to Pensacola to take possession of the grain under the bills of lading. Mr. Kemper refused to accept an order from the railroad company for the grain unless the wharf charges were first paid. No agreement could be

reached over the wharf charges, and so the bank sued for conversion of its property.

L. Z. Leiter has obtained an attachment for \$5,349 against Louis Dreyfus & Co., a brokerage firm of Paris, France. The sheriff has served the attachment on two banks in New York City. The action grew out of the wheat deal of Joseph Leiter of three years ago, when the Paris firm was employed to sell on commission 99,123 bushels of wheat, which had been shipped from New York to Rochefort, France. On this transaction Mr. Leiter claims that there is due him \$5,349, which is the difference between the amount the Paris firm received for the wheat and the amount accounted for to Mr. Leiter. Joseph Leiter assigned to his father his interest in the wheat on June 13, 1898.

EDWARD H. PUGH.

So long as grain inspection is allowed to remain a "matter of judgment" only, there will be differences of opinion ad lib. Recognizing this fact, Minnesota has found a solution of the problem of a final opinion, from which there is no appeal, in the dual state board of grain appeals of six mem-



EDWARD H. PUGH.

bers, three of whom sit at Minneapolis and the other three at Duluth. This board is intended to be made up of practical grain men, each division containing representatives of the different interests concerned in the inspection.

Among the Duluth members of this board is Edward H. Pugh, regarded locally as one of the rising young grain men of the head of the lakes. Mr. Pugh has been made familiar with grain by direct personal contact since boyhood, his father (who represents the fiftieth district in the House of Representatives) having planted the first wheat grown in Blue Earth County, Minnesota. Edward H. was born on this farm on December 3, 1868, and after finishing his schooling, was appointed a member of the state inspection force. This was very soon after state inspection was established in Minnesota, and he remained on the working force until appointed to the appeals board for Duluth by Governor Van Sant on July 31 last. On the organization of the joint boards, Mr. Pugh was made general secretary.

Mr. Pugh's appointment has given general satisfaction at Duluth; and if his colleagues are all as competent men as himself, the character of the appeal boards ought to satisfy all reasonable men of the trade.

The grain dealers of Minneapolis have dismissed their suit attacking the Grindeland law requiring all commission men to take out licenses and to file bonds with railroad and warehouse commission. They now conform to the requirements of the law.

OHIO ASSOCIATION MEETING.

The fall meeting of the Ohio Grain Dealers' Association will be held at Columbus on Thursday, October 24.

In addition to the routine work, there will be a discussion of the new corn crop; the completion of the organization of the Ohio Grain Dealers' Mutual Fire Insurance Association will be effected; a board of arbitration for the ensuing year will be appointed. There will be papers on the following subjects:

"Do We Receive Benefits from Association Work?" by the "Old Wheel Horse," A. E. Clutter, Lima, Ohio.

"Corn—Cool and Sweet, Warm and Hot, Any Old Kind of Corn," by the Caterer, C. H. Tingley.

"The Grain Dealers' Association as Beneficial to the Producer," by C. B. Jenkins.

"Short Weights: Cause and Prevention," by "one between the mill stones," E. W. Seeds.

"Contracts—Buying and Selling," by Jno. Leas.

"Are We as Individuals Doing Our Share of the Work of the Association?" by L. W. Dewey.

The Association will be entertained by the Columbus shippers at a luncheon during the noon recess.

A good meeting and a nice turnout is expected. This Association was never in as good condition as now. New members coming in daily.

A FAILURE AT MINNEAPOLIS.

The St. Paul and Kansas City Grain Company and J. Q. Adams Co., engaged in the elevator and export business at Minneapolis, have assigned. The failure of the latter firm was due largely to the fact that it was heavily interested in the grain company, which assigned the day previous. The St. Paul and Kansas City Grain Company assigned to Fred C. Van Dusen and Peter B. Smith, and the same assignees were named in the assignment of the J. Q. Adams Company. They gave bond in the sum of one million dollars, and have been authorized by the court to continue the business.

The assets of the Grain Company, according to a statement issued September 29, were \$1,193,446.38, and liabilities \$864,751.30. The company owns about ninety elevators along the lines of the Chicago Great Western and the Minneapolis & St. Louis systems, which the assignees will continue to operate. While it is alleged that these failures were due to losses sustained in the Phillips corn corner of last spring, yet it is believed that recent losses in the export trade are more directly responsible. Large quantities of corn and oats shipped to seaboard without having been previously sold abroad and the extreme dullness in export trade, have combined to make heavy losses possible. J. Q. Adams and J. W. Adams are largely interested in both concerns. The other officers of the grain company are: E. W. Folsom, secretary; P. B. Smith and F. J. Wright, directors.

CROPS IN THE CANADIAN NORTHWEST.

Conservative grain men are estimating the grain yield of Manitoba and the territories this year at about 50,000,000 bushels. This estimate is roughly based on an acreage of two and a half million acres and an average yield of twenty bushels to the acre. At 60 cents a bushel this crop would bring to the agricultural interests of the Dominion \$30,000,000. It is certain to bring a large measure of prosperity to all classes.

On the basis of previous crops it is estimated that the railroads of Canada will have to handle for export about 30,000,000 bushels, of which the Canadian Pacific Railway will carry by far the largest part, probably not less than 25,000,000 bushels. The officials of this company admit of no doubts as to the ability of their road to handle this immense quantity of grain, though it is said to be a fact that the elevator capacity of all Manitoba

is only 17,500,000 bushels, including the mill elevators.

A writer in the Toronto Globe attributes the present contentment of Canadian farmers quite as much to the beneficent "Grain Act" as to the bumper crops. This legislation requires commission merchants to take out a license and give bond for the faithful fulfillment of their contracts. The warehouse commissioner also is appointed to investigate all grievances between farmers and warehousemen. This is satisfactory to both parties.

FRANK W. HESS.

Frank W. Hess, who in April last was sent to Sandusky, O., to succeed the late Harry Fitch, who was superintendent of Rosenbaum Brothers' elevator in that city at the time of his sudden death, is a Chicago boy, having been born in this city on October 22, 1863. He has enjoyed the benefits of grain trade associations and influences all his life, his father, Ernest Hess, having been engaged in that line of business. Mr. Hess, after finishing his public school education, took a business college course, and then, at seventeen, was taken by his father to his own elevator and given a complete practical course in elevator work



FRANK W. HESS.

from the foundation up, and until 1895 he had the full management of his father's elevators.

When his father's plant was sold to the Eckhardt & Swan Milling Company he assisted in planning and building a new elevator with capacity of 750,000 bushels, which was erected in June, 1887, only fourteen days being taken for the entire work of construction. This was one of the quickest pieces of elevator work on record. Mr. Hess also had during the period of his career the benefit of foreign travel and the study on our coast and abroad of the methods of handling export grain, his travels having taken him to England, France and Germany.

In December, 1898, he was engaged as foreman of the Rosenbaum Brothers' new 1,400,000-bushel elevator, known as the Belt Line Elevator, located at Steward Avenue and the Belt Railroad tracks, Chicago. He had charge of the receiving and shipping of all grain at this elevator up to April, 1901, when he was sent to Sandusky, O., to take charge of the firm's plant on the death of Mr. Fitch.

This elevator is known as the B. & O. Elevator, being located on the B. & O. R. R. and Sandusky Bay. It has a capacity of 350,000 bushels and receives and ships by water and by rail. Since Mr. Hess has been there he has put in a number of improvements to facilitate the handling of grain from cars, for Mr. Hess has always been driven by an ambition to do quick work. He has also added one of the largest and latest improved separators built by the Huntley Manufacturing Company of Silver Creek, new 36-inch conveyor belts and other machinery furnished by the Skillin & Richards Manufacturing Company of Chicago,

bringing the house up to the high standard of efficiency which Mr. Hess habitually fixes for the elevators of which he has the management.

DOTS AND DASHES

Kansas stockmen are feeding chopped wheat to hogs, and say they find it profitable as a finishing ration.

Hon. W. S. Dunham of Atlanta, Ill., has sold about 16,000 bushels of last year's corn at 55 cents a bushel.

Up to October 1, this year, 11,000,000 bushels of grain had passed through the Canada Atlantic Elevator at Coteau.

Benjamin Brown of Sangamon County, Ill., is said to have sold 40,000 bushels of last year's corn at 57 cents a bushel.

The September receipts of wheat at Duluth this year were 11,350,000 bushels, which is more than any September on record.

The Peavey grain elevator at Chicago, which lost its license at the time of the Phillips corn deal, has again been made "regular."

The congestion of grain in Buffalo elevators, which, during the latter part of September, threatened to become serious, is now relieved, and the storage room is ample.

The Midland Queen, the steamer which made a successful voyage from Manchester, Eng., to Chicago, loaded with iron, loaded grain at West Superior, Wis., for a return cargo.

The new lake steamer George W. Peavey brought into the port of Buffalo one of the largest cargoes of the season. It consisted of 250,000 bushels of wheat, the net weight being 7,500 tons.

It is said that more wheat was moved to market by Kansas farmers during the month of August than in any previous month since the establishment of the State Grain Inspection Department.

The grain trimmers of New Orleans have demanded an increase of wages from 40 to 50 cents an hour, alleging that their work is arduous and dangerous and that they are not steadily employed.

The Great Northern Elevator at West Superior loaded 240,000 bushels of grain into the S. S. W. L. Brown in six hours on September 23. This is not a record, however, as 270,000 had been previously loaded by the house in the same length of time.

The monthly summary of the Bureau of Statistics at Washington for July shows that the Erie Canal had carried, up to the last of that month, less grain than last year by nearly 1,000,000 bushels, but had largely increased its westward traffic in sugar.

The big crop of wheat on the Pacific Coast has made a correspondingly big demand for grain sacks. They are selling at 8½ cents each, which is a high price, and are scarce at that, as the warehousemen do not want to buy any surplus stock at that figure.

An agricultural contemporary, in answer to an inquiry, says that broom corn seed has almost exactly the same composition as corn, but is much less palatable than corn. For fattening cattle or sheep it could be used as corn, so far as its lack of palatability would allow.

The Winnipeg grain inspector's reports for the year ending August 31, 1901, show that there were inspected out of the province via Winnipeg during that year 14,886 cars of wheat, containing 12,355,380 bushels; oats, 448 cars, or 537,600 bushels; barley, 28 cars, or 28,000 bushels; flaxseed, 43 cars, or 35,690 bushels. Nearly one-half the wheat was rated no grade, rejected or condemned.

The director of the department of botany of the Kansas State Agricultural College calls attention to the fact that the seed wheat recently received from Russia contains more or less seeds of weeds. One of these, classed as not dangerous, is "beggar-lice," but another is the hard, black, triangular seed of the wild buckwheat, a black, bind-weed, belonging to the smart-weed family and classed as dangerous. The farmers using the seed should be cautioned to clean carefully before sowing.

GRAIN IN THE INTERNAL COMMERCE OF THE UNITED STATES.

Among the various monographs on American commerce and industry published by the Bureau of Statistics of the Treasury Department in the "Monthly Summary of Commerce and Finance," is one found in the January number on the "Internal Commerce" of the United States. No equal territorial area in the civilized world is open to the free and unrestricted trade of its inhabitants as that covered by the United States, and the volume of its internal has grown to be enormous, giving promise also of still greater volume in normal years of the future as the population of the United States increases. The reasons for this are obvious.

"The internal commerce in the United States," says the author of this monograph, may be said to be carried on between six geographical divisions.

"(1) In New England dairying, trucking and mixed farming have received their fullest development, and the same may be said of New York and parts of the other Middle States. The entire Northeast, including New England, New York and the leading Middle States, is also so largely engaged in manufacturing as to comprise what may be called the Industrial Section of the United States. This group of states is, therefore, closely dependent upon the rest of the country for such raw materials as the other sections supply. (2) The second division is conveniently designated as the Cotton Belt, comprising all that country lying south of the thirty-seventh parallel of latitude and extending west as far as the western boundary of Texas. This whole territory is primarily dependent upon cotton culture for its prosperity. (3) North of this territory, lying between the thirty-fifth and forty-third parallels of latitude and extending to the western boundaries of Kansas and Nebraska, lies the third staple section, which may be called the Corn and Winter Wheat Belt of the United States. Within this belt the production of live stock is a basic factor in agriculture. (4) North of the forty-third parallel, extending westward from the Great Lakes to the eastern boundary of Montana and Wyoming, lies the Spring Wheat Belt. (5) The states usually known as the Rocky Mountain states, comprising Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah and Nevada, are devoted to the production of wool and live stock as fundamental industries of the section. (6) The Pacific Coast states of Washington, Oregon and California are still primarily agricultural. Wheat, barley, live stock, timber and fruits constitute the basis of their prosperity. This geographical grouping of economic activities lies at the basis of the internal commerce of the United States.

"The important fact to be noted is that no one of these geographical divisions is economically self-sufficient, and that the characteristic industries of each of these sections determine the nature of its contribution to the internal commerce of the country. New England, New York and the manufacturing portion of Pennsylvania and New Jersey—the industrial section—draw upon each and all of the other sections for subsistence and raw materials. These states, in turn, contribute manufactures and merchandise to the communities which make up other sections. The cotton belt produces approximately 10,000,000 bales of cotton per year, but consumes only about 1,600,000 bales. All of the balance enters into the channels of trade. A quantity exceeding 2,000,000 bales goes to northern mills, the remainder, or 6,400,000 bales, enters into foreign trade after reaching the coast, and is, therefore, not counted further in the volume of internal commerce. In the winter wheat and corn section lie practically all of the great trunk lines reaching from the interior to the Atlantic seaboard. In this section, therefore, the greatest internal movements occur. Within this geographical division also lie the great concentrating centers for grain and live stock, including eight or ten of the largest primary grain markets, and all of the four or five most prominent stock centers. The western half of this division comprises the leading productive areas, and the eastern half includes the country's principal centers of consumption and its greatest iron industries. So that, on the whole, what is known as the central wheat and corn belt contains the main stream of internal commerce of the United States. The spring wheat belt pours its surplus into the channels of trade by way of the head of the lakes, through which its products are carried eastward fully 800 miles farther to lower lake ports, and thence distributed by railway lines and canals to seaboard cities and intermediate centers of consumption.

"The Rocky Mountain section contributes primarily to the live-stock markets on the Missouri and at Chicago as an eastward movement, and to the demands of the Pacific Coast in a westward movement. Year by year this section has served as a reservoir of supply of raw materials for those industries dependent upon live stock. The rapidly increasing demands for cattle and hogs in Seattle, Spokane, Portland and other points in the far Northwest have called into existence heavy movements of traffic in this direction from the mountain states. The inflowing of settlers, and the increase of town population within these mountain states have greatly increased their productive resources. The development of Asiatic, Alaskan and Hawaiian trade has resulted in the establishment of packing-houses at nearly all important coast points on the Pacific. Consequently, the Pacific packing industry has begun to compete with similar industries on the Missouri and the Lakes. Thus two competing commercial movements have given new prominence to the stock-raising industry in the mountain states. On

the Pacific Coast we have a geographical division within which internal commerce has been growing, but whose foreign trade has advanced possibly still more rapidly. One of the principal movements peculiar to this section is the coastwise trade from Puget Sound and Columbia River to San Francisco and southern Coast points. Lumber and grain are especially important in this movement. The eastward movement from the Pacific Coast section comprises fruits and vegetables, of which citrus and dried fruits are the leading features. It also includes more recently lumber movements by rail from California and from the Columbia River and Puget Sound regions to states drained by the Missouri River and its tributaries. Still more recently shipments of wheat have been made from Oregon and Washington to the Minnesota mills, over a distance of nearly 2,000 miles. This latter movement, however, seems to be exceptional, and not likely to become permanent in the distribution of the Pacific Coast's surplus grain. Nevertheless it indicates the far-reaching area covered by the demand of the centralized milling industry of the Northwest for grain. This demand regularly overreaches national limits. Grain from Canada is continually required for Minnesota milling, just as the cattle industries are drawing largely on Mexico to replenish ranges. These few facts indicate characteristic movements in the commerce of the United States between section and section. Under the present economic development no section of the country has reached such a degree of self-sufficiency as to be independent of other sections for both its means of subsistence and its materials of manufacture; consequently, internal commerce is the most necessary of organized agencies for the interchange of the surplus products of industry among the numerous communities which comprise the national life."

While each of the six divisions indicated has its special, or characteristic, contribution to make to the volume of internal commerce of all the states, there are innumerable supplementary sources of wealth in each division, which add to that volume, such as coal and manufactures in the corn belt; ores, lumber, wheat, etc., in the cotton belt; ores and dairy products in the spring wheat belt; and so on; nevertheless, "the statistics of the internal trade movements show that both the outgoing foreign and the domestic commerce of the country depend in the main upon the industries engaged in the production of these staple products," characteristic of each of the six grand divisions named, manufactures and merchandise in themselves contributing only "a comparatively minor portion of the total tonnage carried in a given year."

According to the Interstate Commerce Commission, the total tonnage of the railroads (187,935 miles) for the fiscal year ending June 30, 1900, was 441,881,623 of classified freight. This tonnage is classified as follows:

Classes of commodities.	Tonnage reported as originating on Mo.	Per cent.
Products of agriculture.....	50,073,963	11.33
Products of animals.....	13,774,964	3.12
Products of mines.....	227,453,154	51.47
Products of forests.....	48,123,447	10.89
Manufactures	59,415,205	13.45
Merchandise	19,844,735	4.49
Miscellaneous	23,197,155	5.25
	441,881,623	100.00

The railways are credited with a further carriage of 68,197,577 tons of unclassified freight, making the grand total for the railways, 510,079,200 tons.

Then there is the upper lake tonnage—25,643,073 net tons through St. Mary's Canal in nine months of navigation, including 2,035,719 tons taken through the Canadian canal. Of this grand total 20,532,493 tons (including 16,064,225 bushels of grain and 6,754,876 barrels of flour) were east bound and 5,110,580 tons (including 110,434 bushels of grain and 5,812 barrels of flour) were west bound. The total lake freight movement for 1900 is reduced to net tons as follows:

Articles.	Receipts, tons.	Shipments, tons.
Products of agriculture....	5,220,285	5,180,945
Products of mines.....	23,541,203	23,475,300
Products of forests.....	3,523,188	2,177,715
Manufactures	277,393	221,636
Miscellaneous	3,471,131	2,438,857
	36,033,200	33,494,453

The only summary of canal traffic given in the monograph, from which we obtain these facts, is that of the Erie Canal system; that is, the five New York state canals. The statistics, which are carefully recorded by the state of New York, "show that the total tons carried on these five canals during the season of 1900 equal 7½ per cent of the classified railway tonnage of the fiscal year ending June 30, 1899." The Erie Canal line proper, during the season of 1900, carried a tonnage equal to 4.8 per cent

of the total classified tonnage originating on the railroads of the United States during the previous fiscal year. It would be interesting and valuable, too, if a similar compilation were made of the business of the many other canals of the country, but as these are more largely local in character than is the traffic of the Erie system, we are not aware that any such compilation has been made. At a time, however, when Congress seems to be "going it blind" at canal building, such a summary intelligently used might serve a most useful purpose.

Coming now to a special examination of the "surplus grain movement" the monograph quoted says:

"The five principal cereals which enter into the commerce of the United States are corn, wheat, oats, barley and rye. Buckwheat and flaxseed are of minor importance in comparison. Of the annual production of most all of these grains a portion is retained for farm consumption and seeding and other local uses, leaving the balance as the commercial crop, which passes into the channels of trade largely within the first four months following the harvest. These different crops, however, have each a different commercial position, and the movement of each one is somewhat affected by this fact. The movements of corn and wheat differ materially in the latter half of this year.

"The commercial corn section—that is, the states on which the rest of the country relies for its commercial supply—includes Ohio, Indiana, Illinois, Iowa, Missouri, Nebraska and Kansas. The states constitute what may be called the corn belt, lying in the very heart of the national territory. Corn also occupies a position of its own in the farm economy of these states. It is so closely connected with the feeding of live stock in preparation for market as to form a basis of this great rural industry. The bearing of the relation between corn and stock upon the commercial position of the producer is of the utmost economic importance, owing to the fact that the live stock economy of farming gives the producer the option of converting the corn into meat when meat prices are high, or of selling his corn direct when the price of that commodity is relatively more profitable than the feeding of stock. At the present time corn demands a higher commercial value on account of the twofold demand for farm consumption on the part of the producer, and for feeding purposes at home and abroad in localities where there is a deficient supply. The South and the East and foreign countries compete at the country elevator with the cattle on the feed lots for the surplus corn crop far more actively than has been the case heretofore. It is difficult to realize how completely this development of dairying and stock feeding within the corn belt has improved the status of the farm as the source of the demand for the corn crop. It is very much as if each farm had been converted into a market or mill creating a local demand for the surplus corn. It corresponds to the rise of cotton mills through the cotton belt, or of small woolen mills throughout the wool-growing section of the central states, or the rise of local flour mills in Kansas and Nebraska, or the rapid development of the feed and flour mills at Puget Sound localities, by creating a new and constant local demand for surplus product whose outlet heretofore has been found only in the deficit corn states of the country or for shipment to Europe. These facts, in the reorganization of the farm as the consuming factor, must be taken into account to understand the changes which have come over the internal commerce of the United States within the latest decade.

"Commercial wheat is much more widely distributed. Not being available for the feeding of stock, it must find its market wherever it can meet the needs of man for subsistence. The main bread foods of the world are rice and wheat. In the markets of the Far East wheat as a food has been gaining ground rapidly, largely through the outlets of the Pacific Coast of the Puget Sound ports—Portland on the Columbia, and San Francisco. It would not as yet be correct to say that wheat and rice are competitors in supplying the oriental demand. It is rather a fact that wheat flour is complementary than that it is competitive where it has found a market side by side with rice as the staple cereal. The demand for wheat on the part of the producing farm household is limited as compared with corn; likewise the demand for wheat is constant in quantity for farm consumption, while that for corn is highly elastic, depending very largely on the quantity of live stock to be maintained over winter. The consequence is that only a very limited and quite firmly fixed proportion of the wheat crop in the United States is utilized for bread and seed on the farm. The great surplus passes out into the world market without any such home demand as surplus corn is subject to. In fact, the position of the surplus wheat producer involves a prominent element of speculative risk unlike that of any other producer of the great national staples, be it corn or cotton. Hence a much larger per cent of the wheat produced is commercial wheat, and the value of that wheat depends to a great extent on the quantity of the surplus wheat available in competing portions of the world, such as Argentina, India, South Russia and Australia. Evidently, therefore, these two commercial crops—corn and wheat—occupy a different place in the distributive movement of the country.

"The movement of corn at St. Louis illustrates the general directions of the distributive process. Taking the receipts of 1899 for illustration, out of 23,394,475 bushels there were shipped 20,138,095 bushels, leaving three and one-fifth million bushels difference between the receipts and shipments. The twenty million bushels in round numbers which entered into distribution from this market were divided as follows: A little more than half (52.4 per cent) went to the Atlantic seaboard points by rail. Only 8.6 per cent

passed into export movement by way of New Orleans, 39 per cent was distributed throughout the East and South for consumption. This, in a general way, shows the proportion of the shipments which are to be credited to domestic and to export movements from this primary market.

"The corn movement in internal commerce takes its rise within a group of seven states, forming the geographical heart of the corn-producing territory. This group comprises Ohio, Indiana, Illinois, Iowa, Missouri, Kansas and Nebraska, the seven states from which comes most of our farm-fed live stock. Indeed, with the commanding position of this commodity in comparison with the corn product of other countries, gives to the corn crop an increasing commercial importance. The following trade review on the subject states the case from the standpoint of the producer, as well as the consumer, for the past ten years.

"According to official figures on the production of corn, which are to be regarded as only approximately correct, the United States in the past five years produced 83½ per cent of the world's crop. This statement, with others regarding increased home consumption and enlarged foreign demands, evidences the importance of this American cereal. In the present, and in years to come, competition in the markets of Europe cannot be serious, for, unlike wheat, corn is not extensively grown in other countries. Even our home acreage does not admit of great expansion, when contemplating our increasing population and uses of corn, without encroaching upon lands otherwise employed. But a few years ago an amount fully 25 per cent less than now enters home consumption sufficed for all needs and satisfied all foreign inquiry.

"A few figures tell the story. Those given on distribution are of the calendar years following the years in which the several crops were grown. The production in 1888 and 1889 was very large, the largest to that time, and must have added some 300,000,000 bushels to the supply that disappeared in the five years, 1890-1894, inclusive. The production in these five years, plus reserves as stated, makes a supply of 8,310,000,000 bushels. This was all gone when the crop of 1895 was matured. The exports in the same period were 272,510,000 bushels. The difference represents an annual consumption averaging 1,607,496,000 bushels. Exports averaged 54,502,000 bushels.

"In the five years, 1895-1899, inclusive, the total production of 10,340,000,000 bushels made an annual average of 2,068,000,000. Exports (estimating the unexpired portion of 1890) of, say 926,000,000, show an average of 187,200,000. In the comparison of the two terms of five years each we have increased production 29 per cent and exports 244 per cent. Since we end the year without reserves it follows that about 1,882,000,000 is the measure of our average home consumption in the past five years. It is now probably 2,000,000,000."

In the grain trade there are ten great primary centers whose functions are concentration for local consumption and distribution. These processes build up the "visible supply" in the elevators which the movement requires, the size and capacities of which vary with the importance of a given center. Thus Chicago has elevator capacity of 57,245,000 bushels, while St. Louis has capacity of only 11,000,000 to 12,000,000 bushels and Kansas City only 6,365,000.

These ten centers, with their receipts for the year 1900, are as follows:

RECEIPTS OF GRAIN AT TEN PRIMARY MARKETS, 1900.

Markets.	Wheat. ¹	Corn.	Oats.	Rye.	Barley.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Toledo	20,888,070	25,648,031	7,376,582	365,517	452,550	54,730,750
Milwaukee	23,188,192	5,780,400	8,506,100	1,165,150	15,963,100	54,602,942
Chicago	89,959,457	134,693,456	105,226,761	1,973,701	17,813,919	349,638,294
Cincinnati	14,484,507	14,420,798	7,392,957	442,215	1,173,742	37,914,219
St. Louis	28,197,429	25,634,410	13,257,925	457,375	2,011,500	69,537,619
Kansas City	31,775,450	8,334,250	3,341,600	170,950	16,000	46,638,250
Detroit	3,896,659	3,378,931	3,217,836	325,416	1,460,622	12,288,467
Peoria	4,411,245	18,595,300	11,263,000	156,600	1,894,700	36,353,845
Duluth	49,939,394	4,169,614	1,393,514	669,420	2,693,663	55,885,605
Minneapolis	84,316,279	6,502,410	10,837,160	509,730	4,551,970	106,717,549
Total	354,085,702	247,126,603	171,813,435	6,236,054	48,045,766	827,307,560

¹Includes flour reduced to wheat.

Not to go into the more minute details of the trade at these ten markets, this review of the part played by grain in the internal commerce of the nation may be concluded by the following quotation referring to the "wheat trade development in the far (Pacific) Northwest."

"Toward the end of the past year some Pacific Coast wheat was hauled to Minneapolis and Duluth, a distance of almost 2,000 miles, at about 30 cents per bushel freight. Of course this remarkable movement is the result of a short supply in Minnesota especially. While this shortage is the main cause, it is worth noting that the increase of mills in the Northwest is beginning to absorb a considerable item of local wheat supply, thereby requiring the large milling centers to go to more remote points than formerly for their supply of grain. In other words, with centralization in large-scale milling there is a perceptible progress in the decentralizing influence of local mills in consuming grain. Minneapolis ordinarily grinds about 65,000,000 bushels of wheat a year, and there are mills at New York City under a single corporate management, which grind 10,000,000 bushels per year. This is one side of the commercial demand. The other side may best be indicated by the fact that there are, according to the "American Miller," about 16,000 grain mills in the country, the great majority of which are

local mills, which depend on the local market to sustain them.

"The handling of wheat in the state of Washington has reached a point of efficiency of which some of the Atlantic seaboard points might well be proud. In fact, the grain warehouses at ports of shipment and at the storage centers where large milling plants are located are among the most complete in the world. Another considerable portion of the wheat in this territory is stored in local warehouses in sacks throughout the producing sections for the period between harvest and the end of the calendar year. This method of handling gives the producer the opportunity of awaiting a rise in prices without obliging him to provide farm granaries for the purpose of holding his crop. This system of distribution requires a large number of local warehouses of considerable capacity in order to relieve the producer, immediately after the thrashing of his wheat, of its care and keeping."

MARK ALFRED CARLETON.

One of the most attractive features of the proceedings at the F. O. M. A.'s recent annual meeting at Milwaukee was the lecture of Mark Alfred



MARK ALFRED CARLETON.

Carleton, cerealist of the U. S. Department of Agriculture, on "The Wheat Industry of East and South Russia." The lecture, in its matter and stereopticon pictures, illustrated in most pleasing manner a phase of the work in which the author

the scientific staff of the Agricultural Department ever since.

Mr. Carleton's work with cereals began as early as 1892, beginning first with the special study of the diseases of cereals, particularly rusts. Finding that the study of the diseases was necessarily very closely associated with the study of the plants themselves, he has since taken up the investigation of cereals, particularly wheats, from all standpoints, and has in recent years given his whole time to that work. The publications he has written on cereals especially are: "Improvements in Wheat Culture," "Cereal Rusts of the United States," "Russian Cereals Adapted for Cultivation in the United States," "Basis for the Improvement of American Wheats," and "Successful Wheat Growing in Semi-Arid Districts." These are all issued by the Agricultural Department; the first and second, however, are now out of print. Mr. Carleton is at present just finishing a bulletin on "Macaroni Wheats," which will be issued by the Department within the next two months.

The subjects to which Mr. Carleton is devoting special attention at present are the establishment of the macaroni wheat industry in this country and the extension of the hard winter wheat area. The accomplishment of the former object will result in adding very largely to our annual wheat production, both by making it possible to grow wheats in districts that are too dry for the cultivation of other varieties and also by increasing the yield per acre in the great plains region. The advantage of the winter wheat work will be easily recognized by all farmers and millers in the Northwest. It is pretty well known that the cultivation of winter wheats on spring wheat lands usually results in an increased yield of something like five bushels per acre. Besides this, winter wheats are generally less subject to diseases than spring wheats. The extension of the winter wheat area northward, therefore, by the introduction of hardy varieties would be a distinct advantage. Expert cerealists are already in possession of facts that show that this can be done to a large extent by the use of hardier varieties from East and South Russia. Some of these varieties have already been secured and distributed to the state experiment stations, and others are to be obtained later in much larger quantities.

As to the establishment of new macaroni types of wheat, which are now attracting quite a little attention among farmers of the Northwest, Mr. Carleton, in a recent letter to this office, says:

"I am sure that the growth of these macaroni wheats will prove to be one of the most important additions to the general wheat industry. The amount of foreign macaroni imported into this country annually is about 15,000,000 pounds, costing something like \$800,000. All of this imported macaroni, however, is made from wheats that can just as well be grown in this country as in Russia, where they are now obtained. At the same time, our own factories are generally using ordinary bread wheats, though most of them admit that the true macaroni wheats would be much better.

"On the other hand, these macaroni wheats can very readily be grown throughout the great plains, especially near the 100th meridian, where ordinary wheats cannot be grown on account of the drouth. They yield almost one-third more than ordinary wheats. They are very resistant to rusts, smuts and other diseases, and especially contain a very large percentage of nitrogen, which is so important in the manufacture of macaroni.

"I am very confident that the cultivation of these wheats will add greatly to our general wheat production. This coming harvest there will be about 100,000 bushels raised, and there is already a demand for more than this quantity. The foreign factories are beginning to want the wheat. Last year something near 4,000,000 bushels of the goose wheat, a true macaroni variety, were sent to France from Canada for making macaroni. Nevertheless, it is almost certain that we can produce a better product in North and South Dakota than is produced in Canada."

Send us the grain news of your county.

TRANSPORTING WHEAT IN AUSTRALIA.

New South Wales has a rather smaller area under wheat than her neighbor, Victoria, but in 1900-1901 the yield was 16,069,363 bushels, which was about 750,000 bushels under Victoria, the two states growing, in the last season, 33,859,939 bushels, out of a total for Australia, Tasmania and New Zealand of 54,000,000 bushels.

One of the most productive districts of New South Wales is the Wellington District, of which the city of Wellington is the chief market town—one of the oldest towns in New South Wales, with

kindly forwarded to the American Miller by Quirk, McLeod & Co., millers at Wellington. The single load shown in one of the pictures weighed 21 tons 302 pounds, being the heaviest load ever drawn into Wellington by road. The regular drivers do not, however, as a rule, wear silk hats.

THE BIGGEST WHEAT FARMER IN SUMNER COUNTY.

The largest owner of wheat lands in Sumner County, Kansas, is said to be John T. Stewart, whose rentals will this year reach, it is estimated, a total of 100,000 bushels of wheat. In his home

end of a big barn and held him there, stuck, for more than half a minute, as if he was the picture of a man instead of the real thing. When the tornado had passed, he dropped to the ground and landed on his feet without a scratch. The same cyclone passed over his house without doing \$5 worth of damage, although it reduced every house for a block around him to splinters. It cut off two or three of his fine maple trees at the base as smooth as if they were sawed off, just to show him what it could have done if it had wanted to, and passed on to pick up a church across the street and make it turn a complete somersault in the air.



MOVING AND STORING WHEAT ON THE FARMS NEAR WELLINGTON, N. S. W.

a history running back to the convict days of the colony. The country has long since passed out of the pastoral era, sheep-raising being the original occupation of both the voluntary and involuntary immigrants; and what was only a few years ago a great sheepwalk, with the lands in the hands of a few individuals, is now occupied by hundreds of farmers, who are turning its acres of rich, black soil into one of the finest wheat fields in the Com-

county he owns 115 quarter sections of land and about thirty quarter sections in adjoining counties. He rents the lands on the basis of half the yield, he furnishing all the seed and taking chances of securing a crop.

Mr. Stewart is about forty-five years of age. He began life in Kansas about twenty-five years ago as a clerk in an abstract office at \$60 per month. He saved and loaned his money on Sum-



HAULING TO MILL THE HEAVIEST LOAD OF WHEAT EVER BROUGHT BY ROAD INTO WELLINGTON, N. S. W.

monwealth. The copious rains are followed by hot days, both uniting to produce a quick growth and, in a propitious season, profitable yields. The custom of sacking the thrashed grain and of stacking the sacks in great piles under a rude shelter of boards reminds one of the methods of our own farmers in the "Inland Empire" of Eastern Washington and Western Idaho, but the monster wagons and great teams of oxen which transport the grain to market are now sui generis. Since the days of overland travel on the great trails to Santa Fe, Salt Lake or Oregon, Americans, at least, have seen nothing like the scenes of these pictures, taken only a few weeks since by a local photographer and

ner County farms. In addition to owning about \$350,000 worth of land, every foot of it paid for, he is credited with the possession of nearly \$250,000 worth of bank stock and \$300,000 invested in farm lands in Sumner County and Oklahoma. He has passed the million mark, and his income is said to be increasing at the rate of nearly, if not quite, \$100,000 annually.

He is still an economical liver and has none of the expensive habits of the millionaire. If he did not get his wealth by luck, a kismet is at least kind to him in other ways; for it is stated that in the great Wellington cyclone of 1892 the wind picked him up and literally pasted him to the gable

OBITUARY

Mrs. J. H. Patten, wife of a well-known business man and grain dealer of Fairdale, Ill., died suddenly at Winnebago City, Minn., where Mr. Patten had bought an elevator.

P. H. Fleming died at Denver, Colo., September 22, after a long illness. He had been prominent in the lake transportation business in Chicago for many years, and was well known in grain circles.

Andrew N. Grady died at his home in North Easton, Mass., September 1, aged 69 years. Mr. Grady had lived in North Easton for 35 years, and for a long time had carried on a flour and feed business. He is survived by one daughter.

Thomas McLeod Clark of Crichton Lodge, near Ottawa, Ont., died September 11, aged 81 years. Mr. Clark was born in Scotland, and for many years was engaged in the grain business at Toronto and Montreal. Two daughters survive him.

Samuel Coffman died recently at Harrisonburg, Va. For several years he was associated with Dr. S. H. Moffett in the grain business at Richmond, Va., and was well known to the grain men of Richmond. His wife and two children survive him.

John W. Tillson died at the home of his sister in Chicago, September 21, aged 59 years. He was unmarried. He had been a resident of Chicago for forty years and formerly was engaged in the stock and grain shipping business, and of late years was a member of the Board of Trade.

Eugene Hotchkiss died at Lewiston, N. Y., October 6, aged 69 years. The immediate cause of his death was apoplexy. Mr. Hotchkiss was a native of Lewiston. In 1855 he went to Milwaukee, Wis., and engaged in the grain business and was a prominent trader in that city for forty years. He was admitted to the Milwaukee Chamber of Commerce in 1868 and continued to hold a membership in that exchange until his death. Six years ago he removed to Buffalo and engaged in the grain business there. He leaves a widow and six children.

D. E. Swift of Stonington, Ill., was shot and almost instantly killed by the accidental discharge of his gun while hunting. Mr. Swift was vice-president of the Pratt-Baxter Grain Company. With two companions he was riding in a wagon from Stonington to Taylorville. They alighted with their guns to shoot game. Mr. Swift was the last to leave the wagon, and in some way his gun caught and was discharged, the full force striking him. When his companions returned to the wagon they found him dead. He leaves a wife and two children.

George Rankin, a member of the commission firm of John Rankin & Co., in the Rialto building, Chicago, committed suicide by shooting himself at the home of his sister in Oak Park, October 11. He was about 50 years old. Mr. Rankin's wife died about three years ago, and since that time he has been subject to frequent attacks of melancholia, which have alarmed his friends. His act was deliberate and he left letters addressed to his mother and father, but was in Chicago the day previous attending to business as usual and gave no intimation of his intention.

Frederick Fraley died at his residence in Philadelphia, September 23, aged 97 years. He was at the time of his death president of the National Board of Trade, which office he had held since its organization in 1860. He was also president of the Philadelphia Board of Trade and a financier of note. He was an original member of the Franklin Institute in 1824 and its treasurer for many years. He helped to promote and organize the Centennial Exposition of 1876, and was elected treasurer. He was a prominent member of many clubs, philosophical and other organizations, and was regarded as one of Philadelphia's foremost citizens.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Oct. 5, 1901, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore	908,000	118,000	377,000	126,000	.....
Boston	800,000	259,000	415,000	.....	.....
Buffalo	1,162,000	1,628,000	257,000	44,000	314,000
do. afloat .....	.....	.....	.....	.....	.....
Chicago	5,209,000	6,705,000	1,995,000	249,000	21,000
do. afloat .....	.....	.....	.....	.....	.....
Detroit	519,000	106,000	90,000	216,000	30,000
Duluth	4,901,000	612,000	432,000	516,000	502,000
do. afloat .....	.....	.....	.....	.....	.....
Fort William	1,748,000	.....	.....	.....	.....
do. afloat .....	.....	.....	.....	.....	.....
Galveston	433,000	.....	.....	.....	.....
do. afloat .....	.....	.....	.....	.....	.....
Indianapolis	416,000	26,000	49,000	2,000	.....
Kansas City	1,408,000	227,000	122,000	.....	.....
Millwaukee	116,000	133,000	431,000	17,000	172,000
do. afloat .....	.....	.....	.....	.....	.....
Minneapolis	6,700,000	12,000	727,000	23,000	100,000
Montreal	109,000	32,000	108,000	40,000	33,000
New Orleans	981,000	104,000	.....	.....	.....
do. afloat .....	.....	.....	.....	.....	.....
New York	3,413,000	775,000	954,000	72,000	157,000
do. afloat	5,000	69,000	.....	.....	.....
Peoria	751,000	56,000	172,000	4,000	.....
Philadelphia	857,000	176,000	55,000	3,000	.....
Pt. Arthur, Ont.	80,000	.....	.....	.....	.....
do. afloat .....	.....	.....	.....	.....	.....
St. Louis	3,476,000	590,000	337,000	74,000	9,000
do. afloat .....	.....	.....	.....	.....	.....
Toledo	635,000	603,000	1,180,000	397,000	8,000
do. afloat .....	.....	.....	.....	.....	.....
Toronto	82,000	.....	.....	.....	47,000
On Canals	432,000	396,000	179,000	17,000	328,000
On Lakes	2,255,000	1,399,000	405,000	.....	273,000
On Miss. River .....	.....	.....	.....	.....	.....
Grand Total	37,474,000	14,026,000	8,283,000	1,800,000	1,394,000
Corresponding date 1900	55,401,000	7,887,000	12,019,000	935,000	1,926,000
Weekly Inc.	2,170,000	537,000	26,000	.....	119,000
Weekly Dec. .....	.....	.....	681,000	.....	.....

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at eight primary markets during the fourteen weeks ending October 7, for the last two years, according to the Cincinnati Price Current, were as follows:

	1901.	1900.
St. Louis	11,661,000	12,456,000
Toledo	4,008,000	4,740,000
Detroit	956,000	846,000
Kansas City	12,329,000	18,853,000
Winter	29,754,000	36,925,000
Chicago	23,571,000	20,136,000
Milwaukee	2,407,000	2,126,000
Minneapolis	23,987,000	19,309,000
Duluth	15,615,000	5,179,000
Spring	65,580,000	46,750,000
Total bus., 14 weeks	95,334,000	83,675,000

RANGE OF PRICES AT CHICAGO

The daily range of prices for cash grain at Chicago for the month ending Oct. 12 has been as follows:

September.	NO. 2* R.W. WHT		NO. 2NO.* SP. WHT		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 1 N.W. FLAXSEED	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
13	70 3/4	70 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	152	152
14	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
15	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
16	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
17	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
18	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
19	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
20	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
21	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
22	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
23	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
24	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
25	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
26	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
27	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
28	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
29	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
30	70 3/4	70 3/4	69 3/4	69 3/4	56 3/4	56 3/4	35 3/4	35 3/4	56 3/4	56 3/4	158	158
Oct. 1	69 3/4	69 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	158	158
2	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	152	152
3	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	150	150
4	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	144	144
5	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	144	144
6	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	144	144
7	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	148	148
8	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	151	151
9	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	147	147
10	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	147	147
11	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	152	152
12	68 3/4	68 3/4	68 3/4	68 3/4	55 3/4	55 3/4	35	35	55 3/4	55 3/4	152	152

* Nominal price. † Holiday.

During the week ending September 27, Prime Contract Timothy Seed sold at \$5.50@5.60 per cental; Prime Contract Clover Seed at \$8.50@8.65; Hungarian at \$0.80@1.00; German Millet at \$0.85@1.10; Buckwheat at \$0.80@1.20.

During the week ending October 4, Prime Contract Timothy Seed sold at \$5.50@5.70 per cental; Prime Contract Clover Seed at \$8.40@8.70; Hungarian at \$0.80@1.00; German Millet at \$0.85@1.10; Buckwheat at \$0.80@1.20.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of September, 1901:

BALTIMORE—Reported by Wm. F. Wheatley, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1901.	1900.	1901.	1900.
Wheat, bushels	2,705,715	932,321	2,168,017	621,559
Corn, bushels	317,355	1,222,288	54,055	1,584,783
Oats, bushels	308,475	969,595	.....	390,251
Barley, bushels .....	.....	5,810	.....	1,050
Rye, bushels	197,353	106,332	91,013	8,571
Timothy Seed, bushels	16,720	16,162	97	719
Clover Seed, bushels	2,316	4,170	.....	2,913
Hay, tons	5,275	3,781	2,309	1,739
Flour, barrels	488,810	352,310	276,724	337,594

BOSTON—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1901.	1900.	1901.	1900.
Wheat, bushels	1,432,661	1,570,734	1,237,741	1,630,080
Corn, bushels	663,848	580,544	542,708	1,048,351
Oats, bushels	511,600	1,634,111	6,246	924,474
Barley, bushels	1,639	42,738	.....	41,756
Rye, bushels	25,967	2,261	24,393	.....
Flax Seed, bushels	37,182	67,179	41,628	41,703
Hay, tons	16,070	5,970	6,216 bal	29,867 bal
Flour, barrels	218,473	327,487	119,789	211,540

BUFFALO—Receipts by lake and shipments by canal, as reported by Chas. H. Keep, secretary of the Merchants' Exchange:

Articles.	Receipts.		Shipments.	
	1901.	1900.	1901.	1900.
Wheat, bushels	8,177,056	8,350,331	4,071,000	5,427,000
Corn, bushels	4,28,487	5,617,004	2,120,000	4,102,000
Oats, bushels	2,122,056	4,253,241	518,000	3,147,000
Barley, bushels	1,447,881	1,027,933	506,000	241,000
Rye, bushels	50,000	153,676	40,000	60,000
Timothy Seed, lb.	9,860	.....	.....	.....
Flaxseed, bushels	563,100	.....	.....	.....
Hay, lb. ....	.....	.....	.....	.....
Flour, barrels	1,376,607	1,559,846	.....	.....

CHICAGO—Reported by George F. Stone, secretary of the Board of Trade:

Articles.	Receipts.		Shipments.	
	1901.	1900.	1901.	1900.
Wheat, bushels	7,716,898	8,722,285	5,184,508	6,599,145
Corn, bushels	8,317,993	11,141,981	7,655,308	9,995,769
Oats, bushels	6,219,594	10,555,816	4,005,918	9,537,397
Barley, bushels	2,465,405	1,612,553	490,427	416,142
Rye, bushels	308,931	195,802	13,035	87,889
Timothy Seed, lb.	7,330,135	7,305,230	7,548,999	8,598,642
Clover Seed, lb.	114,241	1,851,850	61,814	568,739
Other Grass Seed, lb.	1,385,194	525,560	1,330,264	1,025,605
Flaxseed, bushels	432,954	750,184	256,975	537,394
Broom Corn, lb.	2,719,500	855,200	1,843,648	530,717
Hay, tons	20,516	11,766	1,312	60
Flour, barrels	766,773	507,415	499,482	365,491

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1901.	1900.	1901.	1900.
Wheat, bushels	48,271	200,992	48,154	134,811
Corn, bushels	301,792	257,043	218,692	48,006
Oats, bushels	360,773	374,419	143,906	151,159
Barley, bushels	157,356	47,250	4,176	1,771
Rye, bushels	72,607	61,531	30,305	6,502
Timothy Seed, bags	13,697	13,849	9,694	7,927
Clover Seed, bags	3,390	2,252	3,650	1,404
Other Grass Seeds, bags ..	16,703	6,013	8,709	5,776
Hay, tons	17,231	6,023	8,674	2,429
Flour, barrels	262,975	177,888	187,377	194,768

CLEVELAND—Report

ELEVATOR

GRAIN NEWS

AMONG CHICAGO'S ELEVATORS.

Armour Elevator C has received a new coat of red paint.

The steel storage tanks of the Rialto Elevator Co. will be ready for use this fall.

Peavey Elevator B has been declared "regular" by the directors of the Chicago Board of Trade.

The Gerstenberg Elevator at Cragin is now the only elevator in Cook County that remains vacant.

The Columbia Elevator has resumed operations with W. H. Aklater as superintendent, succeeding Arthur De Groodt.

The Armonr Elevator Company have added to the equipment of their Elevator D two of A. T. Ferrell & Co.'s Clipper Seed Cleaners.

Alton Elevators A and B, formerly operated by Geo. A. Seaverns, have been declared "regular" under the present ownership, the Alton Elevator Co.

F. J. Helm, formerly superintendent of the Lake Shore Transfer Elevator, has taken a position as salesman with the Skillin & Richards Manufacturing Company, Chicago.

The Chicago Terminal Elevator and Railway Company has leased the Nebraska City Elevator, heretofore operated by the Nebraska City Packing Company. Its "receipts" have been made regular under the new management.

The Wabash Elevator, recently leased by Rogers, Bacon & Co., has installed two Eureka cleaning machines and a Cyclone Dust Collector. This elevator is no longer "regular," but is operated as a cleaning house. Its storage capacity is 1,500,000 bushels.

H. J. Howard has resigned as foreman of the Iowa Elevator and is now manager of the Howard Transportation Company, which operates a line of grain transfer boats on the Chicago River. M. Hogan is Mr. Howard's successor at the Iowa Elevator.

The Wabash Transfer Elevator at Forest Hill, which was recently given a general overhauling, is again in good working order. A new dynamo and switchboard have been installed and the exterior of the plant repainted and emblazoned with a big advertisement. Pratt & Co. are the operators.

Several important improvements have recently been made at the Lake Shore Transfer Elevator. The rope drives have been changed and two outside fire escapes and standpipes erected. The plant has been made accessible to the fire department by a 4-inch main connecting with the standpipes and running under the tracks to a point about 500 feet south, for steamer connection. Tom Connors, who became superintendent on September 1, for the past six years held a similar position with the D. H. Stuhr Grain Company at Davenport, Iowa.

ILLINOIS.

The Farmers' Elevator at New Holland, Ill., has been completed.

R. M. Lupier has completed a grain warehouse, 97x47 feet, at Carterville, Ill.

C. J. Bender's elevator and feed mill at Warrenhurst, Ill., has been completed.

R. F. Cummings of Clifton, Ill., has completed a 125,000-bushel elevator at Martinton.

Ed Hawthorne, Cooksville, Ill., has torn down his old elevator and will build a new one.

W. D. Smith & Co. have succeeded Abrahams & Young in the grain business at Casey, Ill.

The Turner-Costello Grain Co. will build an elevator at Mt. Auburn, Ill., in the near future.

Stocker & Deininger have succeeded to the grain business of Stocker & Phillips at Peotone, Ill.

F. H. Smith has sold his interest in the Small Grain Co. at Minooka, Ill., to David Hennebry.

Noble Bros. of Foosland, Ill., have had their old elevator torn down and a fine new one is being built.

Ellis & Wagner, Washington, Ill., have let the contract for building an elevator at a cost of about \$4,000.

The Richards & McKinstry Co., La Hogue, Ill., has been incorporated with a capital of \$7,500 to deal in hay, grain, coal, etc. The incorporators are

E. L. Johnson, G. S. Eddy and H. C. Adcock. They are building a 30,000-bushel elevator.

Jacob Steiner & Son expect to build a 12,000-bushel elevator at Mackinaw, Ill., next spring.

Murray & Son of Enreka, Ill., have engaged Flessner & Zeigler to buy grain for them at Secor.

E. A. Brown of Luverne, Minn., has purchased the elevator at Fulton, Ill., and has fitted it up for business.

J. E. Potter of Lafayette, Ill., has purchased the elevator and corn cribs at that place from Frank Hall & Co. of Peoria.

Krapp & Gerring's elevator at Ashton, Ill., will be operated by W. L. Nixon for the Dixon Cereal Company, we understand.

Edwin Beggs of Ashland, Ill., has replaced his 16-horsepower gasoline engine with a Fairbanks-Morse Engine of 22 horsepower.

A 25,000-bushel elevator is being erected at Greenview, Ill., on the site of the one destroyed by fire. D. H. Currey is the owner.

The Advance Elevator & Warehouse Co. of St. Louis, Mo., has been licensed to do business in Illinois, with a capital stock of \$32,000.

Mrs. Joseph Luly has sold her interest in the Farmers' Elevator at Alton, Ill., to G. E. Quickert, miller for the Sparks Milling Co. of that place.

An addition has been built to Ball & Twist's new elevator at the C. & A. Junction, near Toluca, Ill., known as Custer. Wm. Stratton has charge of the elevator.

At Albion, Ill., the grain business of Simon F. Epler and the grocery business of Elbert Epler have been consolidated under the firm name of S. F. Epler & Son.

C. H. & P. G. Jones of Champaign, Ill., have traded their elevator at Mahomet to J. N. Black of Tuscola for a 240-acre finely improved farm in Ford County, 3½ miles east of Paxton.

Puett & Williams have purchased J. M. Davidson & Son's grain elevator at Colfax, Ill. They formerly resided there, but until recently have been conducting a grain business at Cissna Park.

The La Rose Grain Co. of La Rose, Ill., have received a second shipment of two improved 6-inch, 8-duct Hall Distributors, to be installed in their line of elevators on the Alton and Santa Fe roads.

E. L. Augustus has sold to Bentz & Binder of Nokomis, Ill., the elevator at Macon, which he purchased from Jostes Bros. last spring. The new owners have moved to Macon and take possession October 15.

Goff & Yates have begun work on a 65,000-bushel elevator at Rantoul, Ill. It will have an iron roof, 16-horsepower gasoline engine, two dumps and two elevators. It is located on the Illinois Central right-of-way.

Wahls & Yung are now doing business in their new 75,000-bushel elevator at Peotone, Ill. Stocker & Phillips are enlarging their elevator to give them 40,000 bushels additional capacity. These large capacities are rendered necessary by the shortage of cars at some seasons of the year.

CENTRAL.

A. Grove has a new elevator at Radnor, Ind.

Schroeder's new 30,000-bushel elevator at Crown Point, Ind., is completed.

D. P. Moore, Wyatt, Ind., has erected an office building near his elevator.

Walker & Middleton are now doing business in their new elevator at Yale, Mich.

Elmon Fisher, Needham, Ind., is building a 20,000 bushel addition to his elevator.

The Bellevue Grain Company have succeeded Molland & Wright at Bellevue, Ohio.

R. B. Gordon, South Solon, Ohio, has torn down his old elevator and will build a new one.

The elevator at Perrysburg, Ohio, has been quite extensively improved and is now very busy.

T. J. Winget & Son have purchased F. F. Middleworth's elevator property at Linden, Mich.

B. F. Derck has purchased the grain and coal business of Mercer & Neill at Denver, Ind.

D. D. Van Nocker is now doing business in a new 20,000-bushel elevator at Petersburg, Mich.

Pierce Slicker of Tyrone and J. J. Royce have purchased the West Side Elevator at Fenton, Mich.

The North Branch Grain Co., Limited, North Branch, Lapeer Co., Mich., has been incorporated with a capital stock of \$15,000, and are now doing

business. The new company is a reorganization of the North Branch Grain Co.

A. B. Cohee & Co., Bringham, Ind., have sold their general store business, but continue in the grain business.

The Macdougald Engineering Co. are making good progress on the new C. H. & D. steel tank elevator at Toledo, Ohio.

Otto Heinze of Oak Harbor and Harry J. Gordon of Clyde have their new elevator at Curtice, Ohio, ready for business.

Cruikshank Brothers of Bradner have purchased the F. K. Stacy & Son grain elevator, hay and coal business at Bowling Green, Ohio.

L. M. Russell and R. A. Ludwick have purchased the Prescott Bean Elevator at Leslie, Mich. They have overhauled and repaired it, and engaged Charles Price as manager.

H. N. Ainsworth and Wm. Hammer have purchased a large building at Owosso, Mich., and converted it into a model elevator. They will engage in buying and shipping beans and hay.

The Fort Branch Elevator Co. of Fort Branch, Ind., has been incorporated by John F. Kuhn of Evansville, H. E. Agar of Princeton and Hugh McGary of Fort Branch. The latter has been elected secretary and treasurer and will have charge of the business.

The Montpelier National Bank has erected at Montpelier, Ohio, a 30,000-bushel elevator, which has been leased for five years by Hammel & Hepker. It is a thoroughly modern house in every way, equipped with an Enreka Oat Clipper, Wheat Cleaner and Corn Separator. It is operated by a 30-horsepower Foos Gasoline Engine.

At a recent meeting of the stockholders of the Botsford Elevator Co., Port Huron, Mich., it was decided to reimburse the banks for the receipts held by them against the elevator, and which were not covered by grain in store, as represented. The minority of the stockholders, who sought to restrain such payments, failed to put up the required bond.

IOWA.

Wm. Wilkie will build a grain elevator at Wilks, Iowa.

The Peavey Elevator at Perry, Iowa, has just been remodeled.

The Burlington has put in a side track for the new elevator at Traer, Iowa.

A. A. Weston has sold his grain business at Victor, Iowa, and will retire.

J. C. West succeeds West & Davis in the feed business at Villisca, Iowa.

Smith & Son, Lanyon, Iowa, are now doing business in their new elevator.

Counselman & Co. and Fred Borel are completing elevators at Clarion, Iowa.

J. W. Beubow's Sons of Fort Madison, Iowa, have completed their new elevator at Mt. Hamill.

J. R. Harris of Northboro, Iowa, has sold his grain elevator at that place to B. C. Ragen of Elliott.

The Nye & Schneider Co. have purchased the grain business of Wm. Willis & Co. at Woolstock, Iowa.

The Dysart Grain Co. have transferred their elevator at Elberon to the Clinton Grain Co., Clinton, Iowa.

H. A. Vanschoiack of Elliott, Iowa, has sold his elevator at that place to Turner Brothers of Cumberland.

Wm. Thomas of Estherville recently purchased an elevator at Graettinger, Iowa, and moved there to take charge of it.

The Des Moines Elevator Company, Des Moines, Iowa, have begun putting grain into their new 300,000-bushel annex.

G. A. Pierson has sold his elevator at Orient, Iowa, where he has been in business for 15 years. He has purchased a home in Shenandoah.

W. A. Bryant & Sons, Humboldt, Iowa, have installed a new gasoline engine and a new dump and also made other improvements at their elevator.

The Devereaux Elevator at Estherville, Iowa, has been sold to H. M. Douglass of Worthington, who is remodeling it and will use it as a cleaning station.

The Diamond Grain Co. of Des Moines, Iowa, have contracted with Honstain, Bird & Co. of Minneapolis, for the erection of four elevators along the line of the new Des Moines, Iowa Falls & Northern Railroad. A 20,000-bushel house will be erected

at Bergen and also at Sherman, and 28,000-bushel houses at Buckeye and McCallsburg, as soon as the track is laid to those points.

J. E. Bump has disposed of his grain and lumber business and other property at Delta, Iowa, to Frank Dunn. He will soon move to Colorado Springs, Colo.

The Searcliff Elevator at the I. C. yards, Independence, Iowa, was recently greatly improved. A new gasoline engine, wagon dump, cleaning machinery, etc., were added.

The Diamond Grain Co., Des Moines, Iowa, has been incorporated with a capital stock of \$50,000, by Clarence L. Mott, Frank W. Mott and John A. Mott. L. Mott is also a stockholder. They also expect to build other elevators.

An elevator was recently torn down at Danbury, Iowa, that was originally erected at Ida Grove in the early seventies. The interior was largely of native lumber, partly walnut—the price of which is too much elevated to permit of its being used for building purposes to-day.

WESTERN.

Morgan & Watson is a new grain firm at Belgrade, Mont.

G. W. Ford is buying grain at Colfax, Wash., for the Northwestern Warehouse Co.

G. M. McAllister, a pioneer grain buyer of Wilbur, Wash., has sold his warehouse to the Columbia River Milling Co.

Frank Pitts of Hueneme, Cal., recently purchased a load of barley, drawn in by 12 horses, which consisted of 12 tons, contained in 210 sacks.

The Seattle Grain Co. have built a warehouse in the railroad yards at Wilbur, Wash. This gives Wilbur ten warehouses owned by eight different concerns.

A warehouse connected with A. A. Davis & Co.'s flour mill at Medford, Ore., collapsed recently. It contained 7,000 bushels of wheat and 3,000 bushels of barley.

R. C. McCroskey, who has a large farm near Garfield, Wash., harvested 36,000 bushels of wheat from 1,000 acres of land. He says the average cost per bushel for the wheat laid down in the purchaser's warehouse was 23 cents per bushel. Figured at the price of wheat there on October 1, 40 cents, this crop alone would net him \$6,870.

WISCONSIN AND MINNESOTA.

P. H. White is building a 10,000-bushel elevator at Credit River, Minn.

Starks & Co. of Chicago have built a grain elevator at Medina, Wis.

The recently burned Farmers' Elevator at Northfield, Minn., will be rebuilt.

The International Elevator Company is building an elevator at Clarissa, Minn.

The Northern Grain Co. has completed an elevator at Forest Junction, Wis.

The Monarch Elevator Co. will build a 20,000-bushel elevator at Motley, Minn.

The Monarch Elevator Co. has purchased W. J. Lewis' elevator at Staples, Minn.

It is reported that a 2,000,000 bushel steel elevator will be begun this winter at Duluth.

H. P. Christ of Wausaukee, Wis., has installed a feed grinder and gasoline engine in his elevator.

The Brooks-Griffith Co. have purchased and remodeled the old McLane Elevator at Litchfield, Minn.

Hubbard & Palmer have opened their new elevator at Warner, Minn., with Albert Otterson as buyer.

James A. Goudy has resigned his position as grain buyer at Lamberton and purchased an elevator at Stanton, Minn.

The Era Grain Company, Le Sueur, Minn., will erect a new power house and use a gasoline instead of a steam engine.

The American Grain Co. have enlarged their elevator at Belle Plaine, Minn. They have put in cleaning machinery and a 12-horsepower gasoline engine.

The New Richmond Roller Mill Co. has purchased the Northern Grain Co.'s elevator at Spring Valley, Wis. H. F. Tousley continues as local manager.

The Wisconsin Elevator Co., with headquarters at Roberts, Wis., are erecting a grain elevator at Hammond, their present warehouse having proved inadequate to handle the business. The new house

will contain all latest appliances, including gasoline engine.

The Crown Elevator Co. of Minneapolis has increased its capital stock from \$100,000 to \$200,000.

C. W. Cheney & Co., Eau Claire, Wis., have installed a 30-horsepower electric motor to operate their new elevator.

Brooks, Griffith & Co. have remodeled the Thompson Elevator at Litchfield, Minn., which they recently purchased.

Walter Howe, agent for the Powers Elevator Company, has reopened the Farmers' Elevator at Winnebago City, Minn.

Edwin Owens and Clark, Patterson & Co. will build grain elevators on the Northwestern Railway at Wild Rose, Wis.

The Peavey Elevator Co. have installed a gasoline engine to run their elevator at Carver, Minn. Wm. Danens is local buyer.

At Rollingstone, Minn., this season, H. Biltgen is buying for the American Malting Co. and J. Zimmerman for the W. W. Cargill Co.

William Heise, who has purchased the defunct Alma Milling Company's property at Alma, Wis., intends to build a grain elevator there.

Marcus Maurin has installed a 16-horsepower gasoline engine in his elevator at Cold Spring, Minn., and expects to add a feed mill also.

The Oakfield Grain Co., Oakfield, Wis., is now doing business in its new elevator. The company is composed of Geo. Day and John Reinig.

Paul F. Bonlay is now operating the R. F. Allen elevator at Fond du Lac, Wis. He buys all kinds of grain and sells mill feed, meal and seeds.

J. S. Cusick and J. C. Byrnes of Easton have purchased Babcock Bros. & Campbell's elevator at New Richland, Minn. P. J. McCarriek will be the local manager.

The Minnesota & Western Grain Co. have enlarged their elevator at Kennedy, Minn. The elevator capacity of this town has been practically doubled this year.

Frank Jerrue is now doing business in an elevator which he recently purchased at Warren, Minn. He put in a gasoline engine and made numerous improvements.

The Greenwood Produce Company has been formed at Greenwood, Wis., by H. Franckenberg, Oscar Fricke and Ira Rossman. They are buying farm produce, grain and hay.

The Peavey Elevator at Willmar, Minn., has been moved to a new site, and it is likely that the three other elevators there will have to be moved back to make room for another railroad track.

The Farmers' Elevator, Clinton, Minn., opened up for business on September 17, and the price of wheat is said to have jumped up 4 cents a bushel that day. C. H. Campbell is the buyer.

Contractor L. O. Hickok of Minneapolis is building a 30,000-bushel elevator at Eagle Lake, Minn., for J. B. Homeston, also a 15,000-bushel elevator at Browsersville, Minn., for Turner & Brenner Co.

The Farmers' Elevator Association, McIntosh, Minn., after heroically attempting to extricate themselves from their heavy indebtedness, have found too many obstacles in the way and will now either sell or lease.

Hallet & Co., Minneapolis, Minn., have incorporated with a capital of \$50,000 to do a grain elevator and brokerage business. The members of the company are Ferd A. Hallet, Geo. J. Morton and Geo. A. Bausman.

The Powers Elevator Co. of Minneapolis have purchased the Farmers' Elevator at Winnebago City, Minn. They have remodeled the house and put in a cleaning machine. W. C. Howe has been engaged as buyer.

The Globe Elevators at Duluth are being thoroughly overhauled and repaired. Some of the bins are said to have settled out of place as much as two feet. Elevator No. 3 will not be ready for use until about November 1.

The shareholders of the Elbow Lake Grain Co., Elbow Lake, Minn., held their first annual meeting last month and elected a new board of directors. President Ole O. Canestorp reported the purchase during the year of 62,269 bushels of wheat and 13,677 bushels of flax. The directors were instructed to buy a gasoline engine.

The St. Paul & Kansas City Grain Company of Minneapolis made an assignment on October 5 to Fred V. Van Dusen and P. B. Smith. The company owns or controls 70 country elevators. It is controlled by the J. Q. Adams Company, which is capitalized at \$250,000, while the capital of the former company is \$150,000. The failure is said

to be due to a loss suffered last spring during the corn corner conducted by George H. Phillips. The assignees will doubtless continue business.

John Sparrow of Graham, Minn., purchased at auction recently, for \$2,500, the Farmers' Elevator at Rice, Minn. It is understood that he represented an association of some 17 of the best farmers in that section, who will operate it.

The old Imperial Mill Elevator, that has been idle since the collapse of the McIntyre flour trust, has been opened by the Duluth-Superior Milling Company, its present lessee. It adds 1,000,000 bushels to the capacity of Duluth. The second half of the Peavey concrete storage house, which has been under construction all summer, is completed and adds 1,900,000 bushels more to the local capacity. This gives 10,500,000 bushels' capacity on the Duluth side of the harbor and 17,000,000 bushels on the Superior side.

SOUTHERN.

The Valley Planting Company will erect a cotton-oil mill at Rives, Ark.

At Suffolk, Va., the Shoop-Withers Company will build a small grain elevator.

Andrew Reinhardt, a feed dealer of New Orleans, has filed a petition in bankruptcy.

The Geneva Grocery & Grain Company, Geneva, Ala., recently made an assignment.

Cicero Smith will build a large flour mill and grain elevator at Mineral Wells, Texas.

The W. P. Glover Milling Company will build a grain elevator and flour mill at Juliette, Ga.

The Llano Mercantile Company, Llano, Texas, have succeeded to the grain and feed business of J. C. Curry.

The Hill City Oil Works, Hill City, Miss., has been incorporated by T. M. Smedes and others to manufacture cottonseed oil, etc.

W. J. McGown & Co. have completed a new warehouse at Stamford, Texas, to accommodate their wholesale grain business.

The Farmers' & Merchants' Cotton Oil & Manufacturing Company, Mount Pleasant, Texas, has increased its capital from \$30,000 to \$60,000.

The Texas & Pacific's new million-bushel elevator at Westwego, near New Orleans, will be ready for business about October 20. It is arranged so that four vessels may be loaded at the same time. Each belt will have a capacity of 20,000 bushels an hour.

It is reported that the Southern Railway Company are having plans drawn for a grain elevator to be constructed on the Tennessee River at Riverton, Ala. A branch road runs from Riverton to the Memphis & Charleston road. Shipments of grain by boat to Riverton will materially cheapen rates to many southern points.

Augusta, Woods County, Okla., a village a few weeks old, has four new elevators. That of the Choctaw Milling & Elevator Company has 15,000 bushels' capacity. Kartol Brothers have one of about the same size. The August Milling & Elevator Company are building a 60,000-bushel elevator in connection with their flour mill. The fourth elevator is owned by Crowell & Clark.

EASTERN.

C. S. Angus is rebuilding his elevator at Dresden, N. Y.

The Great Eastern Steel Tank Elevator at Buffalo is completed.

Charles Gwinn has purchased J. C. Underhill's grain and fuel business at South Hamilton, Mass.

J. T. Bryant has opened a grain store in connection with his grocery business at Caldwell, N. Y.

The American Feed, Hay & Grain Co. of Baltimore has been incorporated with a capital of \$10,000.

Alex. Leelere has leased the Greenlaw, Page & Doe grist mill at Berlin, N. H., and will engage in the grain business.

Chas. M. Dean of Avoca is now a member of the firm of Dean & Co. at Campbell, N. Y., dealers in grain, hay and produce.

Work on the Grand Trunk Elevator at Portland, Me., is being rushed, and it is now expected to have it in use on or before December 1.

Aaron Brown, miller and grain dealer at Tunkhannock, Pa., has associated with him in business John B. Fassett, and the firm is now Brown & Fassett.

The Common Council of New London, Conn., has rejected the petition of the Central Vermont Railway asking the city to appropriate \$21,000 for eliminating two dangerous grade crossings, on condi-

tion that the company erect a grain elevator and make other improvements in East New London, to cost \$500,000.

The partnership existing between Joshua A. Anderson and W. E. Anderson in the grain and feed business at Whitehall, Md., is to be dissolved.

C. S. Horton & Sons' grain business at Peekskill, N. Y., demanded more room and so they purchased Seymour Bros.' elevator on the Center Dock.

Upton & Co., Pavilion, N. Y., have purchased an old church building, moved it to the railroad, and fitted it up for a feed mill and bean picking establishment.

J. C. Smith & Wallace Co., of 414 Ogden street, Newark, N. J., whose elevator was destroyed by fire some time ago, are considering plans for rebuilding. They may use fireproof construction.

Andrew D. Meloy & Co. of New York City have incorporated with a capital stock of \$100,000, to deal in grain, hay and groceries. The directors are A. D. Meloy, J. S. Manfull and G. G. Power Jr.

THE DAKOTAS.

An elevator is being built at Perkins, S. D.

A farmers' elevator is to be built at Astoria, S. D.

F. A. Bagg has a new elevator at Wahpeton, N. D.

The Stewart Elevator at Granville, N. D., has been completed.

The Peavey Elevator at Litchville, N. D., was completed last month.

The Imperial Elevator Co. are building an elevator at Cando, N. D.

The Powers Elevator Company is building an elevator at Windsor, N. D.

Contractor W. S. Cleveland is erecting a mill and elevator at Jamestown, N. D.

Chesley & Morton have purchased the Shuck & Newton elevator at Geddes, S. D.

The Russell-Miller Milling Co. will erect a 50,000-bushel elevator at Jamestown, N. D.

The Farmers' Elevator Co. are building an elevator on the Omaha Railway at Salem, S. D.

James Johns' elevator interests in North Dakota are now owned by the Powers Elevator Co.

Olson, Pressler & Bolinger are building a grain warehouse at Medina, N. D., for handling grain and flax.

A large fireproof elevator is being built in connection with W. H. Stokes' mill at Watertown, S. D.

The new Farmers' Elevator at Alpena, S. D., has been opened for business with C. D. Worrall in charge.

The Consolidated Elevator Company are building an elevator at Josephine, N. D., on the Oberon extension.

J. J. Decker has purchased a grain warehouse at Menno, S. D., and is having it converted into an elevator.

Contractor W. S. Cleveland is building an elevator and a flour mill building at Jamestown, N. D. The former is to be ready for business by November 1.

The St. Anthony Elevator at Groton, S. D., was recently purchased by Hallet & Co. and George Morton, who have put it in good shape for the season's business.

I. H. Harris is completing some improvements in the elevator at Bathgate, N. D. He recently purchased this from the Brook-Griffith Company and now has two elevators there.

Contractor L. O. Hickok is building two 40,000-bushel elevators at Souris, N. D., on the new branch west of Bottineau. One is for the Winter & Ames Co. and the other for the Turner & Brenner Co.

Contractor W. S. Cleveland of Minneapolis has completed a 20,000-bushel elevator at Kenmare, N. D., for A. G. Ireys. It is equipped with a Fairbanks' Dump Scale and 6-horsepower Fairbanks' Gasoline Engine.

Dell Rapids, S. D., buyers have been indulging in the luxury of a grain war, which is said to have attracted farmers from a distance of twenty miles around. Five cents a bushel above the price

of neighboring towns is reported to have been paid.

At a recent meeting of the stockholders and officers of the Farmers' Elevator Co., Milbank, S. D., it was decided to only buy on a safe margin. If others bid a price that would entail a loss, it will be their policy to let them have the grain.

MISSOURI, KANSAS AND NEBRASKA.

An elevator is being built at Palmer, Kan.

Gregg Bros. have completed their elevator at Belvidere, Neb.

Alexander Harrison has sold out his grain business at Albany, Mo.

The new Andrews Elevator at Carden, Kan., is now receiving grain.

The Thorstenberg Grain Co. are building an elevator at Marquette, Kan.

The farmers at Talmage, Kan., are organizing a co-operative grain company.

Ed Wenzel continues the grain business of E. Wenzel & Son at Eagle, Kan.

J. S. Hart has succeeded to the grain business of Joslin & Hart at Randall, Kan.

The Greenleaf-Baker Grain Company have completed an elevator at Bigelow, Kan.

The Nye & Schneider Co. elevator at Wisner, Neb., has been enlarged and repaired.

P. C. Ball, dealer in grain and coal at Elyria, Kan., has sold out his general store business.

The Beer Fuel Supply Co. are building a grain warehouse at 2100 Grand Avenue, Kansas City, Mo.

A Farmers' Elevator Co. has been organized at St. Edward, Neb., with J. M. McCutcheon as president.

The Robinson-Danforth Milling Company, St. Louis, Mo., will rebuild their recently burned elevator.

James Dickson of Panama, Neb., is reported to have sold his interest in the grain firm of Dickson & Neiveen.

Boyd & Shaforth, Fayette, Mo., have built a warehouse, 34x72 feet, in connection with their mill and elevator.

Henry M. Pollard is building a 10,000-bushel elevator at Nehawka, Neb., to replace a smaller one destroyed by fire.

L. F. Demere has fitted up the vacant mill building at Emerson, Neb., and will use it in connection with his elevator.

The grain firm of McLeod & Hatfield, at Valley Falls and North Cedar, Kan., has been dissolved and Neil McLeod continues the business.

The Van Winkle Elevator, Aurora, Neb., has erected a suitable room and will conduct a flour exchange in connection with the elevator.

A 15,000-bushel elevator is being built at Vista, Neb., for the Winter & Ames Co. of Minneapolis. L. O. Hickok of the latter place is the contractor.

The New Era Milling Co., Arkansas City, Kan., has purchased H. F. Probst's line of elevators on the Kansas Southwestern Railroad. Mr. Probst has been engaged as manager of their grain buying department.

The J. H. Hamilton Co., Board of Trade Building, Omaha, Neb., was incorporated last month with a capital stock of \$300,000. The principal parties interested are J. H. Hamilton, N. H. Brown and J. H. Brown.

The Weston Grain & Stock Co., Weston, Neb., held its annual meeting last month. They reported having handled last season 280,825 bushels of corn, 18,669 bushels of oats, 12,021 bushels of wheat, and 5,041 rye, and 110 cars of hogs. Nels A. Tveson was engaged as manager for another year.

CANADIAN.

Kennedy Bros. are building a grain elevator at Sifton, Man.

Barnett & Johnston have erected a 20,000-bushel elevator at Ochre River, Man.

J. P. Young is the Northern Elevator Co.'s buyer at Portage la Prairie, Man., this year.

The Winkler Farmers' Elevator Co., Ltd., Winkler, Man., has been incorporated with a capital stock of \$12,000.

It is reported that the Buffalo syndicate, headed by Captain Wolverin, having failed to come to terms with the Montreal harbor commissioners, is now turning its attention toward Quebec. They propose to erect elevators along the river front and

start a line of ten steamers between Duluth and Quebec.

Geo. Munson has purchased John Wake's grain warehouse at Shoal Lake, Manitoba, and will buy grain there.

P. J. Frieson & Son of Gretna, Man., have completed a 20,000-bushel elevator in connection with their mill.

The Morton Elevator at Gladstone, Manitoba, is just being finished. Grain warehouses are also being erected at Palestine and Golden Stream.

J. G. King announces that the Canadian Pacific Elevator planned for Port Arthur, Ont., will not be begun before next spring, owing to the high price of steel at present.

John MacLean of Winnipeg, Manitoba, has opened a grain commission business in the Exchange building, under the style of John MacLean & Co. He was formerly engaged with the Northern Elevator Co.

The Botsford-Jeuks Co. of Port Huron, Mich., have been awarded a contract by the Grand Trunk Railway for building a new steel elevator at Point Edward, Ont. It will be completed within a year and will have a capacity of 1,500,000 bushels.

It is stated that the Grand Trunk Railway has engaged R. A. Waite, an architect of Buffalo, to draw up plans for a large grain elevator to be built in Montreal in the near future. It is expected that he will devise quite a departure from the present generally accepted methods of construction.

G. H. V. Bulyea, minister of agriculture for the Canadian Northwest Territories, is authority for the statement that the yield of wheat in Manitoba and the Northwest will average twenty-seven bushels to the acre, making a yield for the territories alone of 12,000,000 bushels. The notable feature of this year's crop is that it is good everywhere.

The elevator being erected at Port Arthur, Ont., for the Canadian Northern Railway, is located out in the water nearly half a mile. The elevator is 100 feet wide, 250 feet long and 175 feet high above water line. The storage capacity is 1,250,000 bushels. The unloading capacity is 250 cars a day, and the loading capacity into steamships 100,000 bushels an hour. The elevator is of semi-fireproof type, having a large amount of steel and concrete in its construction; and all wood used, both inside and outside the building, is covered with sheet steel.

TRANSPORTATION

The demand for cars at northwestern points to move the new grain crop is great.

The Muscatine, North & South Railroad will extend its line from Elrick to Burlington, Ia.

The Marshalltown & Dakota Railroad, running from Frazer to Gowrie, Ia., is to be extended from Gowrie to Sioux City.

The Chicago, Milwaukee & St. Paul Railway is making surveys for an extension of the Des Moines & Northern, from Boone northward to Britt, Iowa.

Shipments of grain from Chicago and South Chicago during the last week in September were 3,045,000 bushels, of which 2,185,000 bushels were corn.

The Fort Smith & Western Railroad is being graded from a connection with the Kansas City Southern just south of Spiro, I. T., west toward Oklahoma.

The Burlington and the Northern Pacific have reduced the through rate on oats from all points east of The Dalles, Ore., including Lewiston, Idaho, and the Palouse country, to Colorado, from 90 cents to 60 cents a hundred.

McArthur Brothers of Chicago are constructing the Southern Missouri Railroad, which is to extend from Missouri Junction, Ill., to Bismarck, Mo., a distance of 49 miles.

The steamer F. B. Wells, the last of four large ships built for the Peavey Grain Company of Duluth, was launched at the South Chicago yards of the American Shipbuilding Company, October 5.

The annual car famine on the east shore of Lake Michigan, which usually sets in just before navigation closes, is now on. The general demand for cars is so great that car builders cannot keep up with it.

Lake grain rates have advanced of late. Chicago to Buffalo moving up from 1¼ to 1½ cents on corn. Wheat has commanded 1½ cents or better. The rate from Duluth and Fort William to Buffalo has been 2¼ cents on wheat.

The Missouri Pacific Railway has cut the rates on grain and grain products from the Missouri River territory to Mississippi Valley common points, the reductions of most consequence being 4 cents a hundred on corn, 4½ cents on wheat and 2½ cents

on flour. Other lines affected by the ent have been in conference with the Missouri Pacific in an endeavor to secure a restoration of rates.

At the twentieth annual meeting of the stockholders of the Canadian Pacific Railway Company, held at Montreal October 2, a resolution was adopted authorizing the issue of bonds to the extent of £480,000 sterling, for the acquisition of steamships and their equipment.

Grain dealers on the Pacific Coast complain that their shipments of grain from east of the mountains have been unreasonably delayed owing to lack of motive power on the railroads. Cars loaded at primary points are not delivered in some instances for six weeks. This is attributed to the fact that large numbers of locomotives are out of repair. The damage to grain interests is considerable.

The action of the eastern railways in advancing grain rates one-half a cent a bushel between Buffalo and New York and Boston on and after October 1 has antagonized the steamship agents. For months grain cargoes have been practically unobtainable at New York and Boston. Grain has been carried free for ballast, and in some instances it has been brought back from Liverpool and carried across again free of charge, simply because the steamships must have it in their holds as a fundamental cargo. Now that the grain movement is on in earnest, the railways have advanced the rates and the steamship companies look on this move as directly antagonistic to their interests.

Fires - Casualties

The elevator of Anthony Brothers at Markle, Ind., was burned recently.

Frederick Lemont's feed warehouse at Philadelphia, Pa., has been damaged by fire.

An elevator at Winthrop, Minn., was wrecked by an overload of grain. The building was badly damaged and the loss on grain was considerable.

John L. Brown, a grain dealer of Fitchburg, Mass., suffered loss by fire October 1. A combination of rats and matches is said to have caused the blaze.

R. Ferland's grain store at 1075 De Montigny street, Montreal, Can., was damaged by fire to the amount of \$1,000. The fire started in living rooms upstairs and was caused by a lamp.

Merle Yocum, while working with a hay press at Wabash, Ind., was caught by a hook on the end of the tongue, which tore a hole in his abdomen. The injury was pronounced fatal.

An explosion in the engine room of the Dakota Elevator Company at Sheyenne, N. D., shattered the windows and blew holes in the roof. At the time of the explosion, Mr. Anderson, the agent, was standing in the doorway, and was thrown out into the street, but was not seriously injured.

Herman Bissell, an employee of Hottelet & Co., wholesale grain dealers of Milwaukee, Wis., was killed in their grain elevator September 12. He was caught in the teeth of a bevel gear and drawn in, his limbs and body being crushed and mangled in a frightful manner, killing him instantly.

The grain elevator of Churchill & Sons, at Meadows, Ill., four miles west of Chenoa, was burned September 25, about 2 o'clock p. m. The fire is supposed to have been caused by sparks from a passing locomotive. The elevator contained 40,000 bushels of grain. Loss, \$25,000; insurance, \$10,000.

The 10,000-bushel elevator of the Minnesota Western Grain Company at Manley, Minn., on the Great Northern railway, was burned October 8. The house contained 8,000 bushels of grain, which with a carload on the track was destroyed. Two horses also were burned. The origin of the fire is not known.

Johnson & Lueck's elevator, at Netawaka, Kan., was destroyed by fire September 17, about noon. The fire started in the boiler house while the men were at dinner, evidently from sparks from the furnace. About 4,000 bushels of corn were destroyed. Loss, \$5,000; insurance, \$2,000, settled at \$1,850.

R. M. Stewart's elevator at Reserve, Kan., was totally destroyed by fire September 6. The fire started from a spark from a passing locomotive. The elevator contained 10,000 bushels of wheat and 5,000 bushels of corn, on which there was no insurance. The loss is estimated at \$12,000. Mr. Stewart will rebuild at once.

The steel steamer Hudson, of the Western Transit Company's line, which foundered with all hands in Lake Superior en route from Duluth to Buffalo, September 16, carried a cargo of 69,000 bushels of wheat and 22,500 bushels of flaxseed. The grain was valued at \$95,000 and was insured for \$86,-

000. The wheat was shipped by the Ames-Brooks Company of Duluth and the flaxseed from the Consolidated Elevators for the Albert Dickinson Company of Chicago.

The grain elevator and lumber yard of the Wakefield Lumber Company, at Wakefield, R. I., were destroyed by fire, September 25, entailing a loss of about \$22,000. Several thousand bushels of grain were burned, and 40 tons of hay, besides lumber and other property. The loss was covered by an insurance of about one-third.

The grain elevator of Elias Cockrell, at Kane, Ill., was partially destroyed by fire September 8. An explosion, due probably to spontaneous combustion, occurred in a coal shed adjoining. The resulting fire was extinguished by a bucket brigade. Two elevators adjoining each other and both filled with wheat were saved from destruction.

A grain warehouse at Kendrick, Idaho, owned by Martin Thomas and operated by the Tacoma Grain Company, suddenly collapsed and fell about three feet on to the railway sidetrack. About 12,000 bushels of wheat in sacks were piled up in the warehouse, none of which was injured, but the building will have to be torn down and rebuilt.

D. H. Curry & Co.'s elevator at Greenview, Ill., was burned September 9, at 3:30 o'clock p. m. The fire started in the roof of the elevator from sparks from a locomotive. This was an 8,000-bushel house and contained about 2,500 bushels of grain, mostly wheat. The plant was insured for \$1,100 and stock for \$900, which partly covers the loss.

The elevator and mill of the Standard Milling Company, at Alton, Ill., were destroyed by fire October 2. The company's loss was \$255,000 and the insurance was \$200,000. The same fire destroyed the Farmers' Elevator plant and caused a loss of \$2,500, and threatened to destroy the entire town. All the burned buildings will be rebuilt as soon as possible.

The Peavey Elevator at Gilby, N. D., was damaged by fire recently through an explosion of gasoline. The agent attempted to start the engine, when an explosion took place and the office was immediately enveloped in flames. The local fire department was called and soon had the fire under control. The damage was small.

The old Drake grain warehouse at Portland, N. Y., was destroyed by fire early in the morning of October 4. The property was owned by B. M. Hagin of Lansing, N. Y., who estimates his loss at about \$10,000. There was not much insurance on the building. The fire started from a spark from a passing locomotive. The Drake warehouse was erected about sixty years ago.

The elevator at Osage, Iowa, owned by J. A. Bortte and operated by the Erie Grain Company, was burned at 11 o'clock a. m., October 5. The building was almost completely destroyed, together with 5,000 bushels of barley and 4,000 bushels of oats, with but little insurance. The fire originated from the explosion of a tank of gasoline.

H. McDonald and H. Escott were bruised and singed by an explosion of gas while repairing a well in the engine house of the Minnesota Elevator, at Claremont, Minn. They were lowering a lantern into the well, when suddenly a terrific explosion occurred and flame burst forth. Both men were knocked over backward, but escaped with no more serious injury than being singed and stunned.

The Grand Trunk Elevator at Point Edward, Ont., opposite Port Huron, Mich., was destroyed by fire September 23, in the afternoon, together with about 50,000 bushels of wheat. The fire is thought to have originated from spontaneous combustion. The building was an old structure of about 100,000 bushels' capacity and was valued at \$75,000. The grain destroyed was insured. The Bottsford-Jenks Company is preparing to erect a new modern elevator at this point, with a capacity of 1,500,000 bushels.

L. G. Evans, for ten years a stock and grain dealer at Aberdeen, S. D., has removed to Minneapolis. He says that land in the neighborhood of Aberdeen that has been in wheat has been put back into grass and that the farmers have turned from wheat raising to corn and cattle raising and have grown financially independent by so doing.

In California ships are loaded with grain directly from the cars, trains being run from the wheat fields to tide water at a very few hours' notice. In Washington and Oregon the wheat is run through an elevator, where it is re-cleaned and mixed with other grades of wheat to bring it to the required standard grade, after which it is resacked and loaded on the vessels or cars for final shipment. About 27,540,000 bushels of wheat are exported annually from the Pacific Coast, with a total value of about \$20,000,000. For the past ten years 2,000,000 bushels of flour have been annually shipped from Pacific Coast ports.

FLAXSEED

It is estimated that 8 to 10 per cent of the new crop flaxseed is damaged by wet weather.

From 2,000,000 to 2,500,000 bushels of the new-crop flax had been sold for export previous to October 1.

The Chicago flax market is considerably stronger than that of Duluth, owing to the large crushing requirements of the former city and the fact that the bulk of the supply must come from the Northwest.

The American Linseed Company has opened an office at Duluth, with E. H. Smith in charge. Mr. Smith has been in the employ of the Bessemer Steamship Company, the former officers of which are now at the head of the American Linseed Company.

According to the report of Flaxseed Inspector Stevens of the Chicago Board of Trade, there was in store in Chicago in regular elevators on Saturday, September 28, 1901, only 672 bushels of flaxseed, as compared with 75,424 bushels in store on the corresponding date in 1900.

Ex-Governor John Miller of North Dakota, head of the John Miller Grain Company of Duluth and Minneapolis, says that while the yield of flax in North Dakota, as shown by the thrasher returns, is disappointing, yet the crop is a large one, owing to the increased acreage.

For several days during the latter part of September flax for September delivery at Duluth was from 13 to 15 cents a bushel above the October option. This was caused by a small squeeze in September flax. Receipts have been so large thus far during October that the shorts have no fear of a squeeze.

George F. Piper, president of the Pioneer Steel Elevator Company, estimates the flax crop of this year at 28,700,000 bushels. He divides the crop among the various states, as follows: North Dakota, 16,200,000 bushels; Minnesota, 7,000,000 bushels; South Dakota, 2,500,000 bushels; all other states, 3,000,000 bushels.

Flaxseed crushers are meeting with some difficulty in getting seed to keep up the crushing demand of about 60,000 bushels a day. The new crop is coming on to the market at an opportune time to keep the wheels turning. About 150 cars a day will be required at Duluth, Minneapolis and Chicago for that purpose.

The Duluth Commercial Record estimates the flax acreage of the Northwest at 3,350,000 acres and the yield of the entire country at 28,000,000 bushels. Declines in the price of flaxseed in all the principal markets of the world are noted of late, and it is believed that the heretofore high prices in American markets cannot hold long.

Flaxseed is selling at a high price, in the face of estimates of a large crop. The high prices of last year and the uncertainty of the quality of this year's crop are factors in the situation. Oil has dropped, caused, it is said, by the fear of manufacturers that they might be caught with a large supply on hand and with the big crop of flaxseed at a low figure. Oil has been sold cheaper lately than it can be manufactured for at the prevailing price of flaxseed. But this condition of the market was only temporary and prices soon adjusted themselves.

Beerbohm indulges in some speculation as to the probable export of flaxseed from the United States for the rest of this year, and gives the figures of last year as a basis of calculation. From the end of August to the end of December last year American exports to England and the continent aggregated 275,000 quarters. Russia, during the same period, exported 710,000 quarters. It is believed that while India and the Argentine can this year furnish about the same amount as last year, Russia will have only about half as much seed available and that America will be called upon for the deficiency. In other words, our crop may be exported to the amount of 630,000 quarters before January 1 next. Authorities in this country estimate that there is available for export of this year's crop at least 1,000,000 quarters. The crop this year is about 10,000,000 bushels greater than that of last year.

Beans sold at \$2.25 a bushel in Chicago September 21. It was a sharp rise, and by many was attributed to manipulation. It is believed that the high price cannot hold, as crops are large and well saved.

Farmers in the Missouri Valley of Nebraska have been compelled to build shelters for their grain for the first time, all the elevators of the country being filled. The use of burlap bags, costing 6 to 7 cents each, has been larger than ever in that country this season.

HAY

Milton R. Lewis succeeds Lauer, Lewis & Co. in the hay business at Scranton, Pa.

The Dyer estate will erect a warehouse at Altamont, Cal., to store over 1,000 tons of hay.

A new hay warehouse is being erected at Shenandoah, Ia., with capacity for 100 tons of hay.

C. B. Crites has removed from Kempton to Spencerville, Ohio, where he has gone into the hay business.

The better grades of hay are in good demand at high prices. Low grades are plentiful and cheap.

Hay of the best quality has been selling of late at Boston for \$17.50 per ton. The best grades are scarce and high.

William Hammer of Flushing, Mich., is now associated with H. N. Ainsworth in the hay business at Owosso, Mich.

It is estimated that 45,000 tons of hay and 5,000 tons of straw are annually used in the city of Omaha, Neb., valued at about \$500,000.

The hay crop in the copper country of Michigan was very light this year, and hay will have to be imported. The local supply is bringing high prices.

Fifteen hundred acres of hay lands in the vicinity of Wind Lake, near Racine, Wis., have been swept over by peat fires and several hundred tons of hay have been consumed.

The demand for hay presses in the Northwest this year breaks all precedent. The demand is so great that implement dealers in some places have been unable to supply it.

The army quartermaster on the Pacific coast has purchased 2,500 tons of hay, besides 4,000 tons of oats, for October delivery to the government for use in the Philippines. The aggregate cost was \$128,000.

The Canadian hay market, as reported by the Montreal Trade Bulletin, is steady and fairly active. Good No. 2 has been selling at country points at \$7. The quality of this year's hay is excellent. Scarcity of cars is complained of.

A recent experiment conducted by the Kansas Agricultural Department in feeding wheat straw to cattle demonstrated that when mixed with about 25 per cent of ground wheat, cattle can subsist upon it, though it is not a fattening ration.

Commissioner O. B. Stevens, of the Georgia Department of Agriculture, advises the farmers of that state to save their hay as far as possible, since they cannot put their usual dependence on western hay, which this year is a short crop.

About \$4,000 worth of hay slid into the bay and was badly damaged when the White Star dock at Seattle collapsed. The dock was completely wrecked, the total damage amounting to about \$80,000. The cause of the disaster was overloading.

The steamer Martin recently took from New York for South Africa 56,952 bales, or 6,035,144 pounds of hay. This is the largest amount ever sent on one steamer, and it was nearly all United States hay. About 40,000 bales were pressed in Indiana.

Wild marsh hay in Minnesota is being baled this year for the first time. Heretofore it has been the custom to stack such hay, but the cost of baling is so small and the price of hay so high that preparations have been made to bale the greater part of it.

In some parts of California and Oregon barley is commonly cut and cured for hay the same as timothy. The report that timothy would sell for \$20 a ton in Kansas City brought a demand for barley hay, and 1,000 tons have been shipped to that city from California.

Bids for the hay raised by the Indians of the Fort Hall Indian Agency, Idaho, were opened September 14, and the hay—about 2,000 tons—was awarded to W. B. Eldredge of Blackfoot, Idaho, at \$6.07 per ton. Mr. Eldredge has the privilege of feeding it out on the reservation.

The Insurance Press claims that the insurance companies will be glad to get rid of the hay business by the formation of a mutual hay dealers' insurance company, and says that 5 per cent on steam hay presses will scarcely cover the losses, to say nothing about commission and other extras.

The value of the hay crop in 1866 was estimated at \$220,000,000. It gradually increased in value until 1889, when it was worth \$470,000,000. In 1895 it fell off to \$395,000,000, and the 1900 crop was estimated to be worth \$445,000,000. Indications are that the crop of 1901 will slightly exceed that of

1900 and that it will bring a larger revenue to the grower.

Reports from Leesburg, Wash., state that the car famine has been a serious damage to the farming interests of the Kittitas Valley. Farmers have been unable to get an outlet for their hay, and the local warehouses have been full to overflowing, while the Sound ports have been clamoring for shipments.

The aggregate of this year's hay crop in the United States is estimated at 51,000,000 tons, being slightly larger than last year's crop, but under those of 1898 and 1899. The 1898 crop was the largest on record, exceeding 66,000,000 tons. The crop gathered this year has been exceeded only seven times in the last twenty-six years, but it is 4,000,000 tons less than the average for the past ten years. One feature of interest pointed out by the New York Commercial is that New York State leads all others with a yield of 5,263,000 tons. Iowa is a good second, with a crop of 5,000,000 tons, and South Dakota a poor third, with a yield of 3,290,000 tons. Pennsylvania comes next with a crop of 3,159,000 tons. In 1900 Iowa and Kansas were first and second, respectively, in point of hay yield. This year, as a rule, the states included in the territory east of Indiana and north of Virginia have a much heavier crop, while in the southern and western states the yield is shorter than in 1900.

REVIEW OF CHICAGO HAY MARKET.

The prices ruling for hay in the Chicago market during the past two weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending September 28 sales of Choice Timothy ranged at \$14.00@15.00; No. 1, \$13.00@14.00; No. 2, \$11.50@13.00; No. 3, \$11.50; Not Graded, \$8.00@14.00; Clover Mixed, \$10.00; Choice Prairie, \$13.00@13.50; No. 1 Prairie, \$8.50@12.50. Inside for State and outside for Kansas and Iowa; No. 2, \$8.00@11.00; No. 3, \$7.00@8.00; No. 4, \$7.00@7.50; Not Graded, \$8.50@12.50. Rye Straw sold at \$5.00@6.00, and Oat Straw at \$4.00@4.75. The receipts for the week were 5,191 tons, against 3,348 tons for the previous week. Shipments for the week were 393 tons, against 243 tons for the previous week. The market for choice Timothy Hay ruled firm. The local demand was good and the offerings were only moderate. Low and medium grades were in liberal supply and dull. Prairie Hay was steady in the early part of the week, with fair offerings and demand. Later, the receipts became smaller and the inquiry quite good. The market closed firm but not particularly higher.

During the week ending October 5, sales of Choice Timothy ranged at \$13.75@14.50; No. 1, \$12.50@13.75; No. 2, \$10.50@12.50; No. 3, \$11.25; Not Graded, \$8.00@13.50; Clover Hay, \$8.00@8.50; Clover Mixed, \$10.00@10.75; Choice Prairie, \$11.00@14.00. Inside for State and outside for Kansas, Nebraska and Iowa; No. 1, \$9.75@13.00; No. 2, \$8.00@12.00; No. 3, \$7.50@8.50; Not Graded, \$8.00@9.50. Rye Straw sold at \$5.50@6.50, and Oat Straw at \$5.50. The receipts for the week were 5,586 tons, against 5,191 tons for the previous week. Shipments for the week were 316 tons, against 393 tons for the previous week. Prices of Timothy Hay showed no material change, but the market closed firm. Prairie Hay was firm throughout the week. The receipts were rather small and demand good for all descriptions. Prices advanced 25@50 cents per ton and the market closed firm at outside figures.

SEEDS

Henry Ross contemplates engaging in the seed corn business at Farragut, Ia., next spring.

David M. Belt will erect a store building near his old stand at Morehead, Ill., and will engage in the seed business.

The Younkerman Seed Company succeeds O. Younkerman & Co. in the wholesale seed business at Council Bluffs, Ia.

M. Philippe Vilmorin, head of the seed firm of Vilmorin & Co. of Paris, is making a tour of America with his wife.

The Leonard Seed Company case against the insurance companies, arising out of the collapse of the seed warehouse in West Lake street, Chicago, in 1899, is still in litigation and was recently up before Judge Gary.

Dealers in grass seed are compelled to analyze it very carefully to see that it is pure. Large firms have their own analysis, and many of them send samples of their seed to Professor Stebler, the Swiss expert, for a confirmation of their own conclusions. In some instances Professor Stebler gets the same seed twice—once from the wholesaler, who sells it with a guarantee of the professor's analysis, and second from the large retailer, who sends samples of it across the water again to see if any mixing

has been done since the first analysis. With all this precaution some dissatisfaction on the part of buyers will arise, for the successful sowing of grass seed depends on the sower quite as much as on the seed.

Clover seed prices this year are lower than they were a year ago—\$5.37 for October delivery, as compared with \$6.25 to \$7 last year. Two years ago the October price was \$7. The receipts this year are large and quality poor. Shipments have been light and demand poor.

C. A. King & Co. of Toledo say that the mammoth or large early clover seed is a fair crop of good quality; the medium or smaller late seed constitutes most of the total crop and is now secured. It promises to be an average crop of rather good quality, except in some sections.

It is said that the western counties of Kansas are still owing to that state some \$25,000 for seed corn furnished to farmers in 1891 and 1895. The state is protected by county warrants, but the counties will probably lose most of the amount, as the farmers have in many instances left the state.

The new seed warehouse of J. R. Ratekin & Son at Shenandoah, Ia., is 36 by 48 feet and two stories high. The lower floor is devoted to sacking rooms, storerooms, etc., while the engine and sheller occupy the basement. On the second floor are the offices, bins and elevators. Cribs for seed corn outside the building will hold 15,000 to 20,000 bushels. The firm has received a consignment of Russian seed wheat direct from the Crimea.

The EXCHANGES

J. F. Blessing of St. Louis has been expelled from the Chicago Board of Trade for conducting a bucket-shop business.

The Decatur Merchants' Exchange, Decatur, Ill., has been incorporated, with a capital of \$5,000, by F. M. Pratt, C. A. Burks and F. L. Evans, to advance the commercial interests of the grain trade.

Chicago Board of Trade memberships have declined somewhat from the high price reached early in September—\$3,200. Recent sales have been at \$2,700 to \$2,800. This is attributed to the general dullness in the market.

John Washburn, president, and F. W. Commons, vice-president of the Minneapolis Chamber of Commerce were re-elected at the recent annual election. The re-election of Mr. Washburn was unanimous and means the continuation of present policies, building plans, etc.

Members of the Minneapolis Chamber of Commerce defeated the proposition to assess each membership \$200 to provide the additional funds necessary to complete the new building. The vote was 198 to 208 in favor of it, thus falling far short of the necessary two-thirds. The financial committee will now have to find some other way of raising the money.

The directors of the Chicago Board of Trade adopted resolutions commemorative of the late Hon. Frederick Fraley of Philadelphia, who for 31 years was president of the National Board of Trade. Mr. Fraley died last month at the age of 97 years. In his death the Chicago Board of Trade, in common with other commercial organizations of the country, has sustained an irreparable loss.

On September 18 the Milwaukee Chamber of Commerce adopted a resolution prohibiting any persons other than regularly accredited members from trading on the floor. This immediately cut off the privileges of forty or more clerks. Memberships previously sold at \$325, but it is thought that none will now change hands at less than \$500, and still higher prices are probable in the near future.

Adolph Hubschman, an attorney, announces that he will appear in Circuit Court and file the petition and complaint in an application for a writ of mandamus, brought by William Jones against the officers and directors of Milwaukee Chamber of Commerce to issue to Jones a certificate of membership. The suit is considered as important, in that it will result in a legal determination of the right of an organization to bar persons holding assigned membership.

The steamer Trentham Hall has taken a cargo of 300,000 bushels of wheat from Brooklyn to South Africa. This is the first heavy shipment of grain that has left this country for South Africa since those made just prior to, and in anticipation of, the Jameson raid, five years ago. The grain is all sacked, none of it going in bulk.

CROP REPORTS

Kansas farmers are changing their corn acreage to wheat, on account of the poor corn crop this year.

The Portland Oregonian estimates that the wheat crop of Oregon this year will exceed 14,000,000 bushels.

Information obtained by the Eastern Indiana Grain Dealers' Association shows that one-third more wheat is being sown in that state this fall than a year ago.

The large sale of grain drills by Kansas City implement dealers is taken to indicate a largely increased area of wheat in that section this fall compared with former seasons.

The wheat crop of Manitoba and the Northwest Territories, in spite of some damage by rains, will average between 20 and 30 bushels to the acre, the yield aggregating about 50,000,000 bushels.

Aroostook County, Maine, is coming into prominence as a wheat-raising section, more wheat being sown last spring than ever and the yield averaging 30 bushels to the acre, with quality unsurpassed.

The Echo Agricole, a French agricultural paper, estimates the world's wheat crop this year at 2,705,136,000 bushels, and for 1900 at 2,572,456,000 bushels. This would be an increase of production over last year of 132,680,000 bushels.

The crop of wheat in Michigan this year will be only about 15,000,000 bushels, or about the same as last year. The average yearly crop of wheat in Michigan previous to 1899 was about 26,000,000 bushels. The acreage seems to have decreased.

B. W. Snow, in his October report, estimates the wheat yield of the entire country at 752,000,000 bushels, of which 460,000,000 is winter and 292,000,000 spring wheat. He estimates the oats yield at 700,000,000 bushels, or an average of 25.1 bushels per acre.

The government estimate of yield of oats is 25.1 bushels, as compared with 29.6 bushels on October 1, 1900; barley, 24.7 bushels, as compared with 20.4 bushels a year ago; rye, 15.1 bushels, the same as on October 1, 1900; buckwheat, 90.5, compared with 72.8 October 1, 1900.

The Nebraska State Bureau of Statistics estimates the corn crop of that state at about 63,500,000 bushels. The Nebraska wheat crop of 1901 is estimated by the bureau at 50,000,000 bushels. This is said to be the first time in the history of the state that her wheat crop has exceeded her corn crop in value.

While wheat has suffered from too much moisture in the North, it has been dried and shriveled by the intense heat in the Southwest. Grain dealers of Salt Lake City, Utah, report that much of the wheat received at that point is badly shriveled, as the result of the fearful heat of midsummer, and that some of it is being shipped out for feed.

The state of Washington is rejoicing over a big yield of grain crops of all kinds, and especially of wheat, and claims to be the first state in the Union in average condition of wheat and in yield per acre, as shown by the government reports. The average condition of Washington wheat on September 1, as given by the Department of Agriculture, was 102, and the average yield per acre for a period of years was given as 24 bushels.

The Ohio wheat crop this year will be 10,000,000 bushels below the average crop of 41,000,000 bushels. The official estimate for this year is 31,086,184 bushels. The oats crop also will be about 10,000,000 bushels under that of 1900, the estimate being 33,729,938. The estimated rye crop will be 2,018,670 bushels, which is nearly three times the usual crop, due to farmers re-seeding wheat lands with rye. The barley yield will be about one million bushels.

During the month of September an exceptionally heavy rainfall has visited South Dakota, the upper Missouri Valley, portions of the Ohio Valley and Tennessee, and the central and west gulf states. Wherever thrashing has been in progress these rains have somewhat interfered with it, and not a little unthrashed wheat has been ruined for any purpose except feeding. In some places grain stands in the fields in shock and is badly sprouted. Complaints of damage by rains come especially from Eastern Washington and Western Idaho, and from North and South Dakota, where the grades of wheat have been lowered considerably by the continued wet weather.

Corn generally has been harvested in time to escape serious injury from frosts. In some parts of Iowa and the Northwest killing frosts have been reported, but they affected only the value of the stalks for fodder, and not the corn itself. The corn condition October 1, as shown by the government crop report, was 52.1, as compared with 51.7 last month and 51.8, the mean of the October averages of the last ten years. This is the lowest October

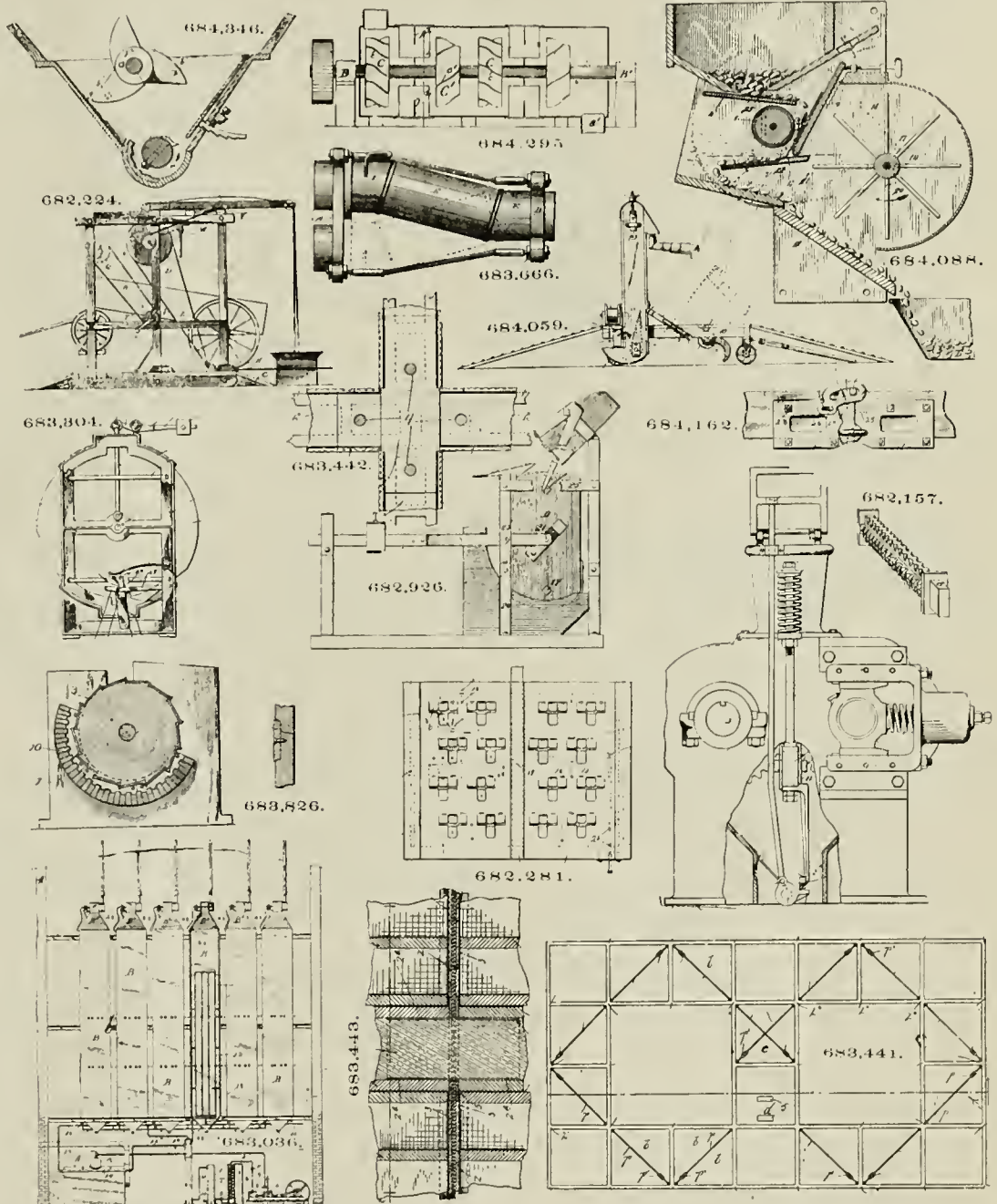
average ever reported. The estimated yield is 1,250,597,000 bushels for the entire country. The yield in 1900 was 2,105,000,000 bushels. While the condition has largely improved in the northern states, it is not so good in the South as it was on September 1. It is noticeable that some of the eastern states are raising large crops of corn, New York state having one of the largest yields in its history.

Late Patents

Issued on September 10, 1901.

Grinding or Crushing Mill.—D. L. Adelsperger, Springfield, Ohio, assignor to the Foss Mfg. Co., same place. Filed April 11, 1901. No. 682,157. See cut.

Apparatus for Grinding, Crushing or Feeding.—



D. L. Adelsperger, Springfield, Ohio, assignor to the Foss Mfg. Co., same place. Filed May 23, 1901. No. 682,158.

Adjustable Screen for Grain or Seeds.—Mathias Schill, Farmhill, and John A. Heintz, Menominee, Wis. Filed March 19, 1900. No. 682,281. See cut.

Portable Elevator.—Walter L. Nicholson, Edholm, Neb. Filed March 2, 1901. No. 682,224. See cut.

Issued on September 17, 1901.

Grain Weigher.—Anton Goehring, Edgeley, N. D. Filed March 30, 1901. No. 682,926. See cut.

Issued on September 24, 1901.

Grain Treating Apparatus.—Geo. R. Gorham, Chicago, Ill. Filed October 13, 1898. No. 683,036. See cut.

Automatic Grain Weighing Device.—John T. Lemon, Columbus, Ohio. Filed Oct. 20, 1899. No. 683,304. See cut.

Issued on October 1, 1901.

Grain Car Door.—Gust Young, Hallock, Minn. Filed June 14, 1901. No. 683,718. See cut.

Fireproof Grain Elevator.—Fred W. Cooley, Minneapolis, Minn., assignor of two-thirds to Geo. T. Honstain, same place. Filed Feb. 16, 1901. No. 683,441. See cut.

Fireproof Grain Elevator.—Fred W. Cooley, Minneapolis, Minn., assignor of two-thirds to Geo. T. Honstain, same place. Filed March 11, 1901. No. 683,442. See cut.

Fireproof Grain Elevator.—Fred W. Cooley, Minneapolis, Minn., assignor of two-thirds to Geo. T. Honstain, same place. Filed April 9, 1901. No. 683,443. See cut.

Pneumatic Conveyor Valve.—Grant S. Shannon, Houston, Texas. Filed April 29, 1901. No. 683,666. See cut.

Cotton Seed Huller.—Frank A. Wells, Florence, Kan. Filed April 24, 1901. No. 683,826. See cut.

Issued on October 8, 1901.

Conveyor.—John Q. Adams, Marseilles, Ill. Filed May 17, 1901. No. 684,142. See cut.

Device for Unloading Grain from Wagons.—Samuel Guth, Jasper Co., Ind. Filed May 22, 1901. No. 684,059. See cut.

Grinding Mill.—Jay C. Bowsher, South Bend, Ind. Filed Jan. 26, 1900. No. 684,346. See cut.

Grain Scourer.—Frederick A. McLellan, Fort

Worth, Texas. Filed May 13, 1901. No. 684,295. See cut.

Separator.—Benj. B. Newman, Tampa, Fla. Filed Sept. 13, 1900. No. 684,088. See cut.

Canadian wheat is moving via Duluth in bond in larger quantities this year than usual. It is grading well.

Government contracts aggregating \$128,660 for hay and oats for shipment to the Philippines have been awarded to Pacific Coast dealers. The prices paid for the hay range from \$13.50 to \$16.70 per ton at Puget Sound ports, and for oats, from \$22.45 to \$23.90 per ton.

One of the sons of Ole Walaum, a farmer who died two years ago near Holmen, Wis., found a sack containing \$860 in the bottom of a wheat bin on the farm. Of the amount \$460 was in gold and the remainder in bonds and securities. The sons had searched in vain for this treasure, and at last found it by accident.

Reports from Walla Walla County, Wash., and Umatilla County, Ore., the last of September, stated that there were about 9,000,000 bushels of wheat, mostly in warehouses in that section, and that the movement of grain for export had been almost nothing. Exporters say that there is no demand and wheat buyers generally are looking for a big drop in prices. Usually at this time of year everyone is working overtime shipping grain.

PERSONAL

J. A. Waller is now manager of the elevator at Litchfield, Minn.

M. D. Larkiu of Barry, Minn., is now buying wheat at Little Falls, Minn.

H. Hasty is in charge of the grain elevator at Standish, Mich., this season.

W. N. Hogsett of Macomb, Ill., is in the grain buying business at Rusk, Okla.

The new elevator at Hannah, N. D., is in charge of a Mr. Gilmonr of Wales, N. D.

Ed Engler will have charge of the new elevator that is being built at Herried, S. D.

W. T. Spillane has taken a position in the Monarch Elevator at Red Lake Falls, Minn.

Aaron Peterson is representing H. H. Smith & Son in the grain business at Lanyon, Ia.

A. E. Johnson has removed from Buffalo, Minn., to Minneapolis, and is engaged in the grain business.

F. C. Chinn, agent for the Edmonds & Londergan Elevator Company at Le Mars, Ia., is succeeded by William Morse.

George M. Marshall, a grain dealer of Belvidere, Ill., has secured a membership in the Milwaukee Chamber of Commerce.

Frank Ogden succeeds A. S. Garber in the management of the elevator at Valley Junction, Ia. Mr. Garber goes to Idaho.

D. C. Knapp, who has had charge of an elevator at Hannaford, N. D., has taken charge of the new elevator at Kathryn, N. D.

John J. Bell of Orion, Ill., who has been bookkeeper for the Moline Elevator Company, has decided to locate in California.

George A. Stead, formerly of Hutchinson, Minn., is now traveling for the John Miller Grain Commission Company of Minneapolis.

James Lilley has taken the position with the Empire Elevator Company of his father, R. Lilley, who has gone South for his health.

Walter Huyck of Cedar Falls, Ia., has been employed by W. A. Bryant & Sons Company to take charge of an elevator at Bristow, Ia.

Perry H. Greer of the Marseilles Manufacturing Company, Marseilles, Ill., was married October 9 to Miss Mabel Driver of Racine, Wis.

Walker W. Cannon, president of the Cannon-Weiner Elevator Company of Butler, Mo., was married August 31 to Miss Daisy Hulse.

F. E. Snider has removed from Chesaning, Mich., to Owosso, Mich., where he has engaged with Ainsworth & Hammer in the grain and hay business.

Andrew Weisman, for many years wheat buyer for Maurin Brothers, at Cold Springs, Minn., is buying wheat this year for the Jennison Company at Royaltou, Minn.

W. O. Rearick, who has been connected with an implement factory at Center Hall, Pa., has removed to Milroy, Pa., where he will engage in the grain business.

Louis Thompson has severed his connection with the firm of Brainard & Co., Devil's Lake, N. D., and has taken a position in the elevator of Ames & Winter, at the same place.

F. A. Wilson writes us from Winfield, Kan., where he has been at the Santa Fe Elevator, that he has been transferred to his old stand at Argentine, Kan., with the same company.

Clarence Fitten, a grain sampler on the Peoria (Ill.) Board of Trade, has been appointed manager of a new elevator at Mansfield, O., which is now being built for Henry L. Goemann & Co. of Chicago.

William Shick, a grain dealer of Zanesville, O., was painfully injured by collision of his carriage with a beer wagon. Mr. Shick was thrown over the dashboard of his wagon and alighted on his shoulders.

Thomas Chandler, who has been representing the Spencer Grain Company at Dickens, Ia., has returned to Everly, Ia., to take charge of the same company's house at that place. Samuel Stokes succeeds him at Dickens.

D. Hunter, Hamburg, Ia., president of the Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri, passed through Chicago the last of September on his way home after a three weeks' visit at Toronto and points in Canada.

Eugene M. Stevens, general auditor of the Peavey Elevator System, has resigned to go into the financial brokerage business. Mr. Stevens has been with the Peavey company for ten years, and has worked through the different departments of

the Peavey system from bookkeeper to auditor, and for the last four years has been general auditor in Kansas City, Omaha, Duluth and Chicago, with headquarters in Minneapolis.

COMMISSION

H. V. Lester, who has been in the grain trade at Chicago for a long time, has purchased a membership on the New York Stock Exchange and will move to New York.

The Coe Commission Company of Minneapolis has secured offices in the Grundy block, Winnipeg, Man., and will transact a general grain commission business under the local management of F. E. Hewett.

The Burks Grain & Elevator Company has been incorporated at Decatur, Ill., with capital stock of \$30,000, to do a general commission business. The incorporators are Charles A. Burks, Arthur S. Dumont and Milton Johnson Sr.

The Syracuse Stock & Grain Company has purchased the brokerage business of William H. Cummings, at 165 Genesee street, Utica, N. Y. L. J. Elder will be in charge. This company has a number of offices in the interior of the state.

The Coe Commission Company of Minneapolis has opened an office at Fergus Falls, Minn. Gordon Wimmer is in charge of the new office. The company has a system of private wires extending from Minneapolis to Fargo and Winnipeg and westward to Helena and other cities in Montana.

Finley, Barrell & Co. of Chicago have opened a branch office at La Crosse, Wis., in the Coren Building, under the management of J. L. Van Wormer. The new office has private wires to St. Louis, Minneapolis and Chicago. Mr. Van Wormer, the manager, has been identified with the grain business for a long time.

Cole, Cleveland & Curley, hay and grain commission merchants at No. 116 Broad Street, New York, made an assignment September 18 to William Sutler, without preferences. The partners are Edmund C. Cole, Albert F. Cleveland and William H. Curley. They were for many years in the employ of a leading New York firm in the same line and started in business for themselves in August, 1900.

E. L. Welch, formerly president and manager of the Poehler Elevator Company, and C. A. Malmquist, formerly of the Minnesota State Board of Appeals, has formed a partnership in the grain commission business in Minneapolis, with main offices at 400 Corn Exchange, and branch offices in Duluth, Chicago and Milwaukee. The firm name is E. L. Welch & Co. They are members of the Minneapolis Board of Trade and of the Clearing House.

At the last moment it was decided not to launch the George H. Phillips Grain Commission Company on the sea of actual business. A coterie of friends offered to furnish Mr. Phillips the necessary capital to start in business himself. The group included J. R. Collins and Daniel P. Hill, and the offer was not conditioned by a demand for security. It was accepted by Mr. Phillips, who dissolved the previous arrangement. He resumed business September 25.

Edward G. Heeman has formed a connection with George H. Phillips, Chicago, and has again taken up the cash grain commission business. In addition to having a competent salesman to dispose of such grain as may be consigned to the firm, he will give his personal attention to that branch of the business. As manager of the cash grain department of the firm Mr. Heeman will follow out all his past methods, especially so far as pertains to the publishing of daily and special market letters.

OUR CALLERS

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

David Plewes, Toronto, Ont.
F. H. Holt, Indianapolis, Ind.
J. D. Shanahan, chief grain inspector, Buffalo, N. Y.

John O. Foering, chief grain inspector, Philadelphia, Pa.

H. G. Wolf of the Wolf Company, Chambersburg, Pa.

Thomas Costello, president Illinois Grain Dealers' Association, Maroa, Ill.

J. M. Allen, Minneapolis, Minn., representing the Wolf Company, Chambersburg, Pa.

D. Hunter, president Southeastern Iowa and Northwestern Missouri Grain Dealers' Union, Hamburg, Iowa.

BARLEY AND MALT

Oregon barley is moving toward Europe. Several cargoes were shipped from Portland during September and more is to follow.

Shipments of barley from San Francisco to New York have begun. The American sailing ship John Ena, 4,000 tons, sailed recently.

Albert Schwill & Co., Chicago, have incorporated the business with capital stock of \$300,000, with the above title. The incorporators are Albert Schwill, Henry A. Langhorst and Julian W. Mack.

The Davenport Malt & Grain Company has broken ground for the new elevator which it proposes to build at Davenport, Ia. It will be an iron tank elevator with capacity of 1,000,000 bushels, 65 feet long by 32 feet wide and 70 feet high, and cost \$16,000.

The Chilton-Malting Company has erected one of the largest elevators in the state of Wisconsin at Chilton. It is 120 feet high and has a capacity of 350,000 bushels. The company is erecting also a large brick malt house, which will soon be ready for operation.

The Red Wing Malting Company has let the contract for the building of its new elevator at Red Wing, Minn., to S. H. Tromenhaner of Minneapolis for \$20,000. The new building will be 48 by 140 feet and 140 feet high, and will have a capacity of 200,000 bushels. It is to be completed by January 1.

Max Weisenfeld of Munich, Germany, has secured a patent on an apparatus for germinating grain. It is a stationary steeping vat, having an outlet at the bottom from which the grain may be removed, and a series of movable, hollow, perforated partitions within the vat, through which air may be forced.

Bernhard Fischer of Heidelberg, Germany, has secured a United States patent on a stirring apparatus for undried malt, which consists of a carriage that can be moved backward and forward, spiral, perforated tubes arranged to rotate in opposite directions, and a blower which forces the damp air through the perforations in the tubes.

Receipts of barley at Cincinnati during September were 157,356 bushels and shipments 4,176 bushels, as against receipts of 47,250 bushels and shipments of 1,771 bushels in September, 1900. The receipts of malt during the month this year were 79,564 bushels and shipments 44,486 bushels, as compared with receipts of 72,334 bushels and shipments of 49,617 bushels in September, 1900.

William H. Prinz of Austin, Ill., has patented a process for steeping and washing grain by maintaining a constant circulation of water in a series of tanks, discharging a portion of the water and admitting fresh water from time to time. The water is drawn off at the top and supplied at the bottom of the tank, this motion being adapted to removing with the water any diseased grain. Mr. Prinz has patented both process and apparatus.

An English steamer that was loading at Odessa, Russia, with barley for Copenhagen was stopped by the harbor master, who found that the cargo was largely adulterated with sand. The matter was placed in the hands of the public prosecutor. The harbor master declares that if merchants will ship sand and barley in the same cargo it must be in separate bags or holds, but that the mixing shall not with his knowledge take place in Odessa harbor.

Capitalists of Sioux Falls and of Davenport, Ia., will erect a big malting house at Sioux Falls. Contract has been let to the Barnett & Reoord Company of Minneapolis, and the buildings are to be ready by January 1 next. The contract price is \$97,000. The buildings will be of brick or stone. The machinery is to cost \$26,000 and will consume 2,000 bushels of barley daily. The company is capitalized at \$200,000 and is known as the Dakota Malt & Grain Company of Sioux Falls. The stockholders are prominent business men of Davenport and Sioux Falls.

Barley ranks fourth in the cereal crops of the United States, following corn, wheat and oats. The acreage has varied in fifteen years from 2,583,125 acres in 1898 to 3,400,361 acres in 1892. The crops have varied from 55,792,257 bushels in 1898 to 87,072,744 bushels in 1895. The farm value of the crop has varied from \$22,491,241 in 1896, equal to 32.3 cents per bushel, to \$45,470,342, or 52.4 cents per bushel in 1891. The best average price was 62.7 cents per bushel in 1890. The area this year was 2,863,000 acres, and the yield is esti-

mated by some authorities at over 50,000,000 bushels.

IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.			
Imports—	Bushels.	Value.	
August, 1900	19	\$	17
August, 1901	20		18
Eight mos. end'g Aug., 1900.	18,677		9,108
Eight mos. end'g Aug., 1901.	5,379		2,443
Exports—			
August, 1900	1,538,235		687,006
August, 1901	779,615		342,926
Eight mos. end'g Aug., 1900.	9,659,163		4,492,098
Eight mos. end'g Aug., 1901.	2,432,795		1,074,847
BARLEY MALT.			
Imports—			
August, 1900 .....	....		....
August, 1901 .....	....		....
Eight mos. end'g Aug., 1900.	3,462	\$	3,648
Eight mos. end'g Aug., 1901.	2,641		2,671
Exports—			
August, 1900	33,949		25,302
August, 1901	33,949		25,302
Eight mos. end'g Aug., 1900.	208,657		153,470
Eight mos. end'g Aug., 1901.	267,693		181,676

Al. Ragains, hauling for William Connerly, drew with six horses nine miles from Tutuilla bottoms to Mission, Wash., 115 sacks of wheat, weighing 16,435 pounds, or eight tons and 435 pounds, making an average of a trifle more than one and one-quarter tons to the horse.

While September exports of grain from Baltimore are disappointing, the record for August shows that Baltimore led all the Atlantic and Gulf ports by a large margin. During August Baltimore sent out 6,715,174 bushels, against only 321,031 in August, 1900. At other leading ports the shipments of wheat during the month were: New Orleans, 3,844,824 bushels; New York, 3,345,635; Galveston, 3,211,598; Philadelphia, 2,439,006, and Boston, 1,933,054.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

FOR SALE.

Fairbanks & Morse Gasoline Engine, 4 to 5 horsepower. Good as new.

CROWN MFG. CO., 506 Second St. S., Minneapolis, Minn.

GASOLINE ENGINES.

All makes of gasoline engines bought, sold, rented and exchanged. Address

M'DONALD, 36 W. Randolph St., Chicago.

GASOLINE ENGINE.

A 16-horsepower Fairbanks-Morse Gasoline Engine, good as new. Cheapest power for elevators. Price low. Address

THE BARTHOLOMEW CO., Peoria, Ill.

FOR SALE.

We have a large stock of boilers, engines, steam pumps and pulleys for sale. Write for specifications and prices to

PHILIP SMITH, Sidney, Ohio.

MICHIGAN GRAIN ELEVATOR.

For sale cheap, a first-class, well equipped grain elevator, located in a thriving village and first-class farming community in Michigan. For particulars write

MICHIGAN, Box 10, care "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE.

One 72-inchx16-foot boiler.

Two 66-inchx18-foot boilers.

One 18-inchx24-inch Automatic Engine.

One 42-foot, 60-ton Buffalo Track Scale.

One 24-inchx54-inch Vilter Corliss Engine.

STEPHENS & TYLER, 1505 Monadnock Bldg., Chicago.

ILLINOIS ELEVATOR.

For sale, the Halderman Elevator, capacity 25,000 bushels. Gasoline engine and two dumps. Good opening for stock buyer and coal dealer. Inquire of

N. H. HALDERMAN, Mt. Carroll, Ill.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WANTED.

One Atlas Engine, cylinder 10 or 11x16, right hand. Give condition and price.

CRABBS & REYNOLDS, Crawfordsville, Ind.

WANTED

A first-class grain grader. State age, experience, references and salary expected. Address

GRAIN GRADER, Box 10, care "American Elevator and Grain Trade," Chicago, Ill.

CORN COBS WANTED.

Wanted, 1,000 tons of corn cobs for delivery at Cincinnati or Sandusky, Ohio, during winter. Must be dry and in good condition for grinding. Name price delivered. Address

COB, Box 9, care "American Elevator and Grain Trade," Chicago, Ill.

NO MORE MUSTY CORN.

Use Beale's Adjustable Corn Crib Ventilators. Allows you to build cribs 16 to 24 feet wide. Saves 30 per cent in building material. No more musty corn. Write to

N. S. BEALE, Tama, Iowa.

WANTED.

Wanted, old engines, boilers and scrap iron.

For sale, complete power plants.

We can rebores your cylinder and valve seats right in their position. Address

FISHER MACHINE WORKS, Machinists and Engineers, Leavenworth, Kan.

REPRESENTATIVES WANTED.

Millwrights, machinery dealers and manufacturers' agents wanted to represent us in their territory, on commission, for the sale of elevating, conveying and power transmitting machinery, mill and elevator supplies. Address

WELLER MFG. CO., 118 and 120 North Ave., Chicago, Ill.

E. R. Ulrich & Sons, SHIPPERS OF WESTERN GRAIN,

Especially High Grade White and Yellow Corn, Also Mixed and White Oats.

Elevators along the lines of the following railroads in Central Illinois: Wabash; Chicago & Alton; I. C.; C. P. & St. L. and Pawnee.

Main Office, 6th Floor, Illinois National Bank Building,

SPRINGFIELD, ILLINOIS.

Write for prices delivered.

No Wheat For Sale.



SEAMLESS COTTON GRAIN BAGS,

Jute Grain Bags,

Seed Bags,

SECOND-HAND BAGS.

No. 1 Menomonee Street, MILWAUKEE, WIS.

ROOFING AND SIDING.

The Garry Iron and Steel Roofing Co.,

168 MERWIN STREET, CLEVELAND, O.,

MANUFACTURES



Steel Roofing, Corrugated Iron, Siding and Metal Ceiling.

SEND FOR CATALOGUE

SYKES STEEL ROOFING CO.,

611 So. Morgan Street, CHICAGO.

Eastern Works: NILES, OHIO.



WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc. We make a specialty of

Corrugated Iron and Metal Roofing for Grain Elevators,

And take contracts either for material alone or job completed. We have done a large amount of this work in the past three years, in fact, we are the largest manufacturers of this material in the Western States. Write us for prices. We can save you money.

COMMISSION CARDS.

[We will not knowingly publish the advertisement of a bucketshop keeper or irresponsible dealer.]

T. P. Baxter, President.
James Parrott, Vice-Pres't.

F. A. Roennigke, Secretary.
Trave Elmore, Treasurer.

PARROTT-BAXTER GRAIN CO.

COMMISSION,

GRAIN, HAY AND SEEDS.

414 Chamber of Commerce.

ST. LOUIS.

L. F. Miller & Sons,

RECEIVERS AND SHIPPERS OF

GRAIN, FEED, SEEDS, HAY, ETC.

OFFICE 2933 N. BROAD ST., PHILADELPHIA, PA.

CONSIGNMENTS SOLICITED.

Special attention given to the handling of Corn and Oats

References: { Manufacturers' National Bank, Philadelphia, Pa
Union National Bank, Westminster, Md.

GEO. N. REINHARDT & CO.

MELROSE STATION, NEW YORK CITY.



We sell on Commission and buy direct,

HAY, GRAIN AND FEED.

Storage capacity 8,000 bales, 30,000 bushels
Let us know what you have to offer.

COMMISSION CARDS.CHAMBER OF COMMERCE,
DETROIT, MICH.LIBRARY BLOCK,
DECATUR, ILL.**C. A. BURKS & Co.,**
GRAIN AND MILL FEED.MEMBERS OF { **Detroit Board of Trade.**
Illinois Grain Dealers' Association.
Patronage of Regular Grain Dealers Solicited.

ESTABLISHED 1876.

W. A. RUNDELL & CO.,
GRAIN AND SEEDS,

SPOT AND FUTURES.

CONSIGNMENTS and FUTURES given special
attention.Ask for our "Daily Market Letter and Track Bids."
Correspondence requested.33 Produce Exchange, - **TOLEDO, OHIO.****Thos. H. Botts & Co.****FLOUR, GRAIN AND GENERAL**
COMMISSION MERCHANTS.....214 Spears Wharf, 213 Patterson Street,
Baltimore, Md.REFERENCES—First National Bank, C. Morton Stewart & Co.
I. M. Parr & Son, BALTIMORE. Dunlop Mills, Warner, Moore
& Co., RICHMOND, VA.

LEMAN BARTLETT.

O. Z. BARTLETT

L. Bartlett & Son,**GRAIN AND PRODUCE**
COMMISSION MERCHANTS.**BARLEY A SPECIALTY.**Room 23 Chamber of Commerce Bldg
Milwaukee, Wis.Careful attention given to orders from Brewers, Maltsters and
Millers.**SMITH-GAMBRILL CO.,**

Chamber of Commerce, Baltimore, Md.,

GRAIN COMMISSION
RECEIVERS AND EXPORTERS.

RICHARD GAMBRILL, Western Manager, Chicago, Ill.

**F. H. PEAVEY & CO.,**

Minneapolis,

GRAIN RECEIVERS.

Minn

Consignments Solicited.

MILLING WHEAT A SPECIALTY.**JOHN WADE & SONS,****Grain Dealers.**

Members Merchants' Exchange. Warehouse Capacity, 250 Cars.

MEMPHIS, TENN.

J. F. ZAHM.

F. W. JAEGER.

F. MAYER.

ESTABLISHED 1879.

J. F. ZAHM & CO.,**GRAIN and SEEDS,**
TOLEDO, OHIO.MEMBERS: { **Toledo Produce Exchange,**
Chicago Board of Trade,
New York Produce Exchange.Handling consignments and filling orders for
futures **OUR SPECIALTY.****SEND FOR OUR RED LETTER.****COMMISSION CARDS.**MEMBER
Detroit Board of Trade.ESTABLISHED
1880.**C. E. BURNS,**
Grain Buyer and Shipper,

Specialties:

OATS, RYE AND BEANS.

Detroit, Mich.

ESTABLISHED 1872.

RYE A SPECIALTY.

D. G. STEWART,**Wholesale Grain,**

1019 Liberty Avenue,

PITTSBURG, PA.**Proprietor Iron City Grain Elevator.****CAPACITY, 300,000 BUSHELS.****DANIEL P. BYRNE & CO.,**

Successors to

Redmond Cleary Com. Co.Established 1854.
Incorporated 1887.**GRAIN, HAY AND SEEDS.**

Chamber of Commerce, St. Louis, Mo.

DANIEL McCaffrey's Sons,**Leading Hay Dealers,****PITTSBURG, PA.**

Consignments solicited. Reference: Duquesne National Bank

ESTABLISHED 1867.

WARREN & CO.,**...GRAIN...****COMMISSION MERCHANTS,**

Rooms 7 and 9 Chamber of Commerce,

PEORIA, - ILL.**THE SAMUEL BORN CO.,****GRAIN.****COMMISSION. BUYERS. SHIPPERS.**

Chicago, Ill.

La Fayette, Ind.

Buffalo, N. Y.

J. S. SIMPSON & CO.

(Members Chicago Board of Trade),

COMMISSION MERCHANTS,
GRAIN AND PROVISIONS,

14-16 Pacific Avenue,

Opposite Board of Trade.

CHICAGO.**COMMISSION CARDS.****CHARLES D. SNOW & CO.,****COMMISSION MERCHANTS,**MEMBERS
CHICAGO BOARD OF TRADE.228 and 230 Rialto Bldg.
CHICAGO.Our Special Market Letters and Pocket Manual furnished free
on application.**E. W. WAGNER.****Consign Your Grain.**

We make good sales.

We make prompt returns.

We make our customers money.

707, 708 and 709 Rialto Building, **CHICAGO.****MILMINE, BODMAN & CO.,****Commission Merchants.****STOCKS,**
BONDS,**GRAIN,**
PROVISIONS.**Receivers and Shippers.**5 and 7 Board of Trade,
CHICAGO.401 Produce Exchange,
NEW YORK.

CORRESPOND WITH

GERSTENBERG & CO.,Grain and
Seeds.Commission
Merchants.Barley a
Specialty.**8-10 PACIFIC AVE., CHICAGO, ILL.****DON'T DOUBT**That a Strong, Energetic, Successful Correspondent
at Chicago, can do much to promote the success of
your grain business.

WE BELIEVE IT, WE KNOW IT!

CAN WE DEMONSTRATE IT TO YOU?

POPE & ECKHARDT CO.,

317-321 Western Union Building,

CHICAGO.**W. R. MUMFORD CO.****GRAIN, SEEDS, HAY, MILL STUFFS.**

528-532 RIALTO BUILDING, CHICAGO.

23 CHAMBER OF COMMERCE, MINNEAPOLIS.

29 CHAMBER OF COMMERCE, MILWAUKEE.

605-606 BOARD OF TRADE, KANSAS CITY.

214 NORTH FOURTH ST., ST. LOUIS.

Careful attention given Cash and Futures.

Specialties—Wheat, Barley, Seeds, and Selling by Samples.

Grain Dealers,:: :: **WE WANT YOUR BUSINESS.**If you appreciate **Honest Work, Good Treatment and**
Prompt Returns consign your grain to us.**CALUMET GRAIN & ELEVATOR CO.,****CHICAGO.**

ARTHUR R. SAWERS in charge of receiving business.

VAN NESS & WILSON,**Commission Merchants,**500 Royal Insurance Building, **CHICAGO.****SOLICIT YOUR ACCOUNT.**Members:
CHICAGO BOARD OF TRADE.References: **CORN EXCHANGE NATIONAL BANK.**
BANK OF MONTREAL.

COMMISSION CARDS.

PRIVATE WIRES.

ARTHUR R. JONES & CO.,
Members Chicago Board of Trade

GRAIN STOCKS
PROVISIONS BONDS

226-228 La Salle Street, - CHICAGO

ARMOUR GRAIN CO.,
205 LA SALLE STREET,
CHICAGO.

GRAIN BUYERS AND DEALERS.

E. W. BAILEY & CO.,
Commission Merchants,
GRAIN, SEEDS AND
PROVISIONS

72 Board of Trade, CHICAGO.

M. M. DAY,
NOW WITH
E. W. WAGNER,

Is in a position to serve his patrons to
best advantage.
Consign your grain. Ask us for bids,
and give us your future trades.

MARKET LETTER ON APPLICATION.

709 Rialto Bldg., Chicago, Ill.

J. H. WARE. E. F. LELAND.

Consign your grain and seeds and send your
Board of Trade orders to

WARE & LELAND,

200-210 Rialto Bldg., Chicago.

GRAIN PROVISIONS,
STOCKS AND COTTON.

Write for our Daily Market Letter.

Your interests are our interests.

Special attention given to cash
grain shipments.

COMMISSION CARDS.

ESTABLISHED 1865.

L. EVERINGHAM & Co.,
Commission Merchants.

ORDERS AND CONSIGNMENTS SOLICITED.
GRAIN AND SEEDS OF ALL KINDS
For Cash and Future Delivery.

Sulte 80 Board of Trade, - - CHICAGO, ILL

W. F. JOHNSON. GEO. A. WEGENER.
W. F. JOHNSON & CO.,
GRAIN, SEED AND PROVISION
Commission Merchants

Orders for future delivery carefully executed.
Consignments and correspondence solicited.
Room 59, Board of Trade, CHICAGO.

C. H. Matthlessen, President. S. T. Butler, Vice-President.
Chas. L. Glass, Treas. and Sec'y.

The Glucose Sugar Refining Company,
FACTORIES: GENERAL OFFICES:
Chicago } Ill. Marshalltown } Ia. The Rookery,
Peoria } Davenport } CHICAGO, ILL.
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The world's largest consumers of Corn. Daily consumption
100,000 bushels. We are always in the market for corn, and
confine our bids to regular grain dealers. Write or wire us when
you wish to sell.
JOS. P. GRIFFIN, Mgr. Grain Dept.

W. H. MERRITT & CO.,
Grain Buyers and Shippers.
CORRESPONDENCE SOLICITED.
234 La Salle St., CHICAGO, ILL.

COMMISSION CARDS.

M. ROSENBAUM, Prest.

E. L. GLASER, Secy.

ROSENBAUM BROTHERS,

COMMISSION RECEIVERS
MERCHANTS, AND SHIPPERS,

Grain and Seeds,

Room 77 Board of Trade Bldg., CHICAGO.

HENRY HEMMELGARN. Established 1861. PHILIP H. SCHIFFLIN
H. HEMMELGARN & CO.,
COMMISSION MERCHANTS,
GRAIN, SEEDS AND PROVISIONS,
ROOMS 317, 318 AND 319 RIALTO BUILDING,
Adjoining Board of Trade. CHICAGO, ILL.
Consignments Solicited. Correspondence Invited.

As Agent for Buyers and Exporters, I supervise shipments and
certify same. None but thorough experts employed.

SETH CATLIN,
GRAIN EXAMINER AND SAMPLER.
Office, 423 Rialto Building, CHICAGO.

I have had twenty years' experience as a Seaboard Inspector
with the New York Produce Exchange Grain Inspection Depart-
ment. Correspondence solicited.

RUMSEY, LIGHTNER & CO.,
COMMISSION MERCHANTS
Grain, Feed, Provisions, Seeds.
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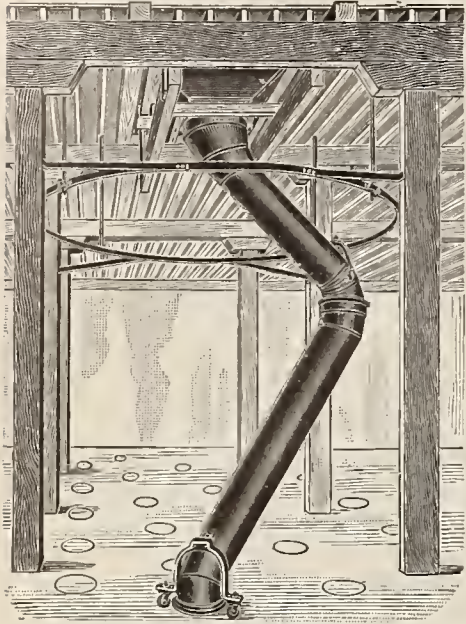
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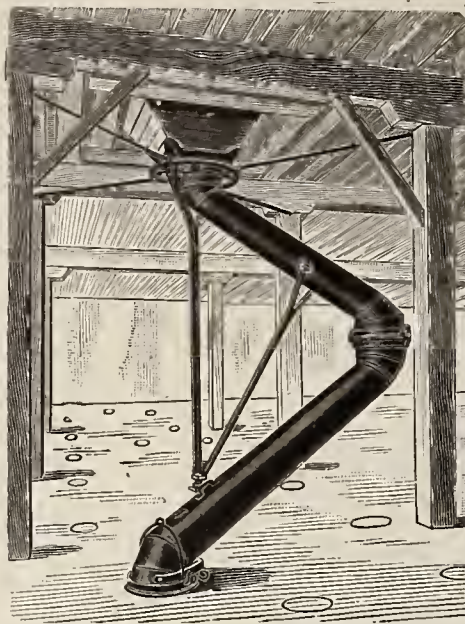
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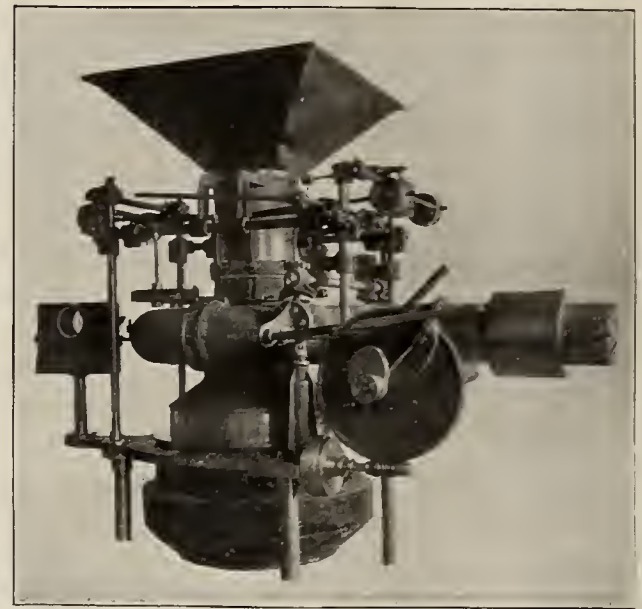
A glance at our News department this month will show that hundreds of dealers have ordered new buildings, machinery and supplies during the past month. THE AMERICAN ELEVATOR AND GRAIN TRADE has hundreds of other readers who will do the same thing next month, and every succeeding month. Would it not pay you to try to secure a share of their trade?

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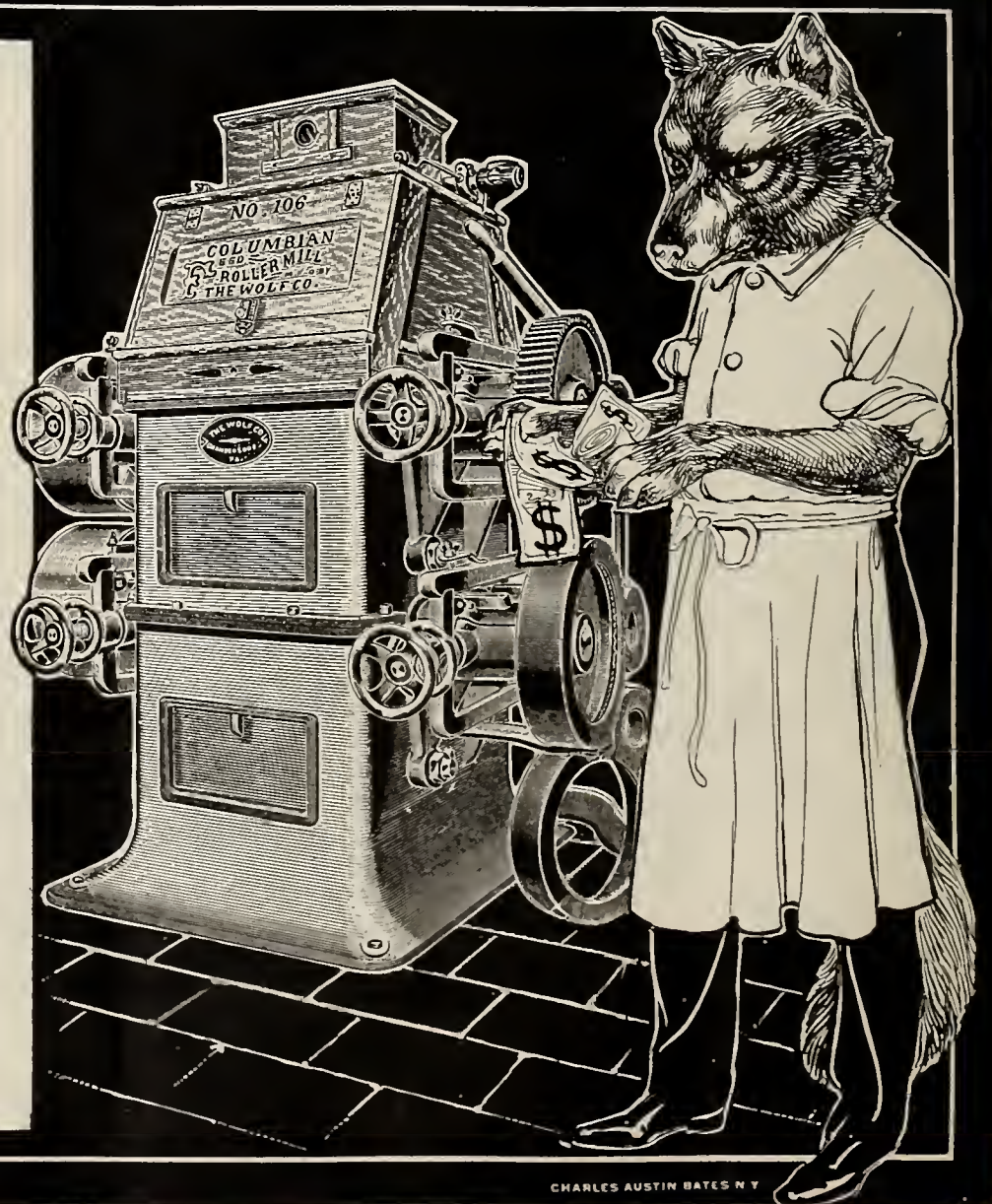
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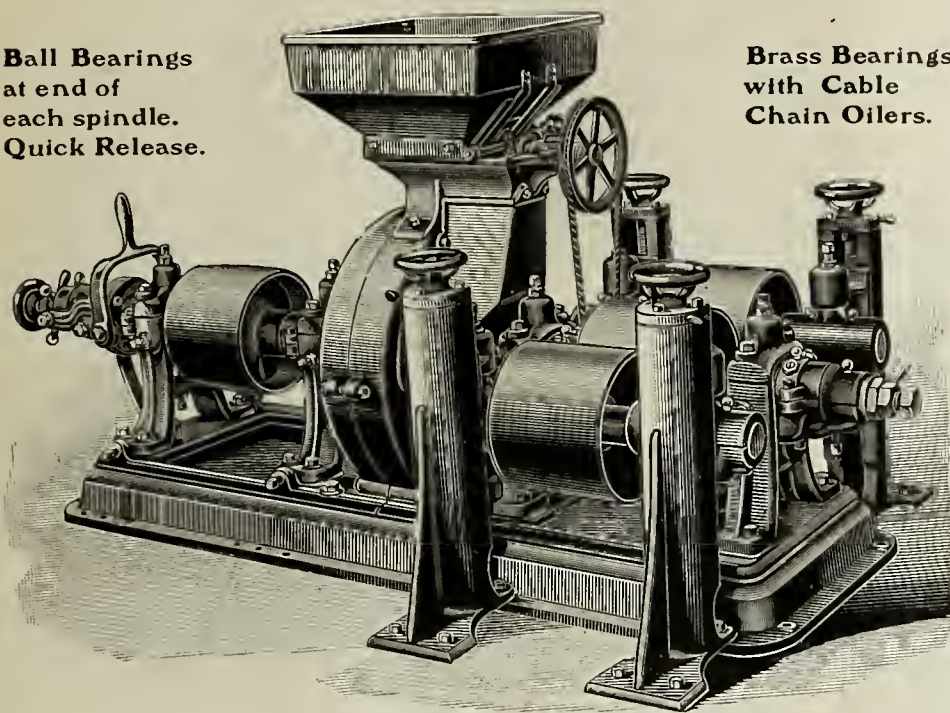
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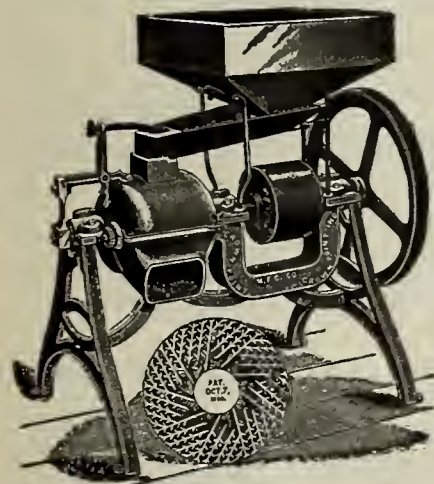
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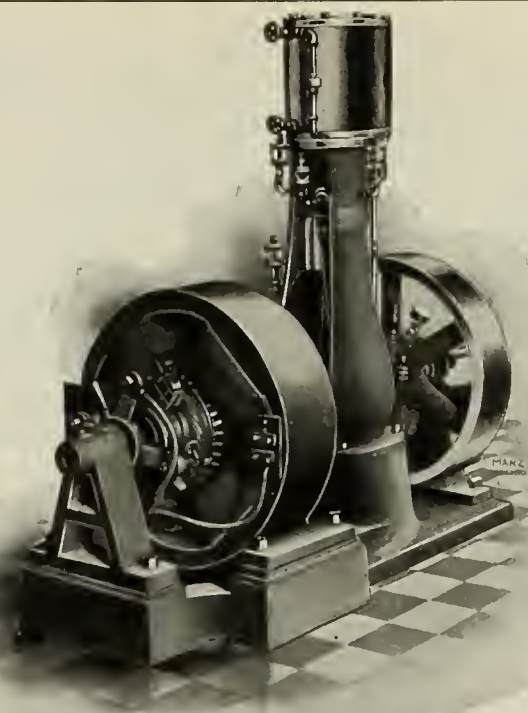
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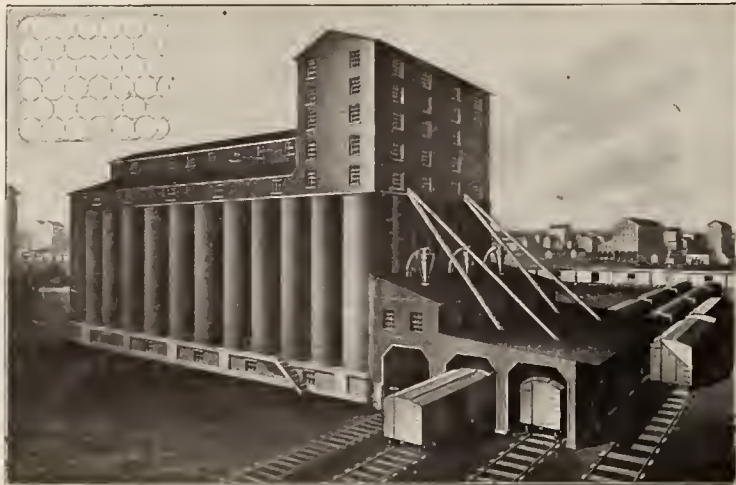
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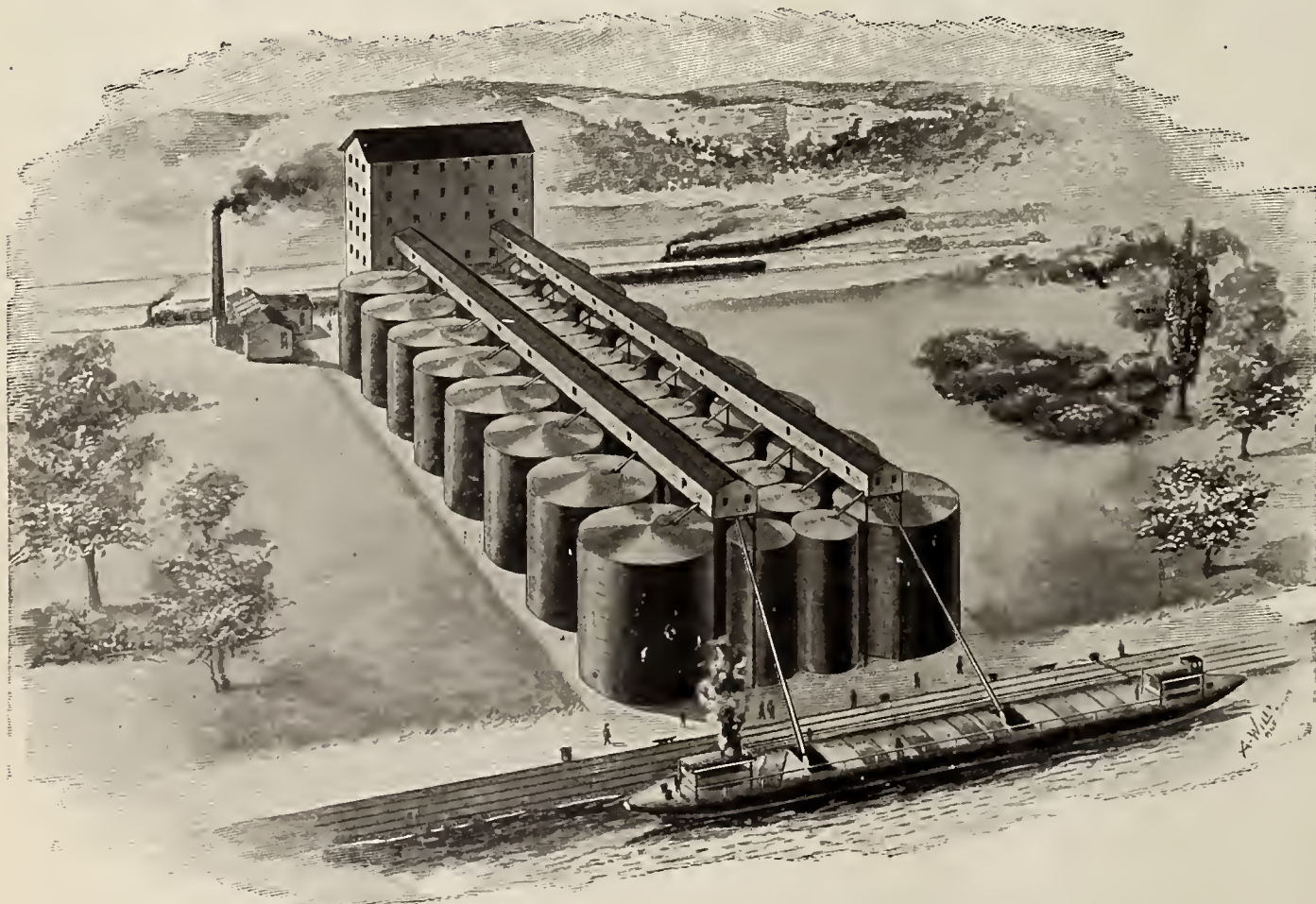
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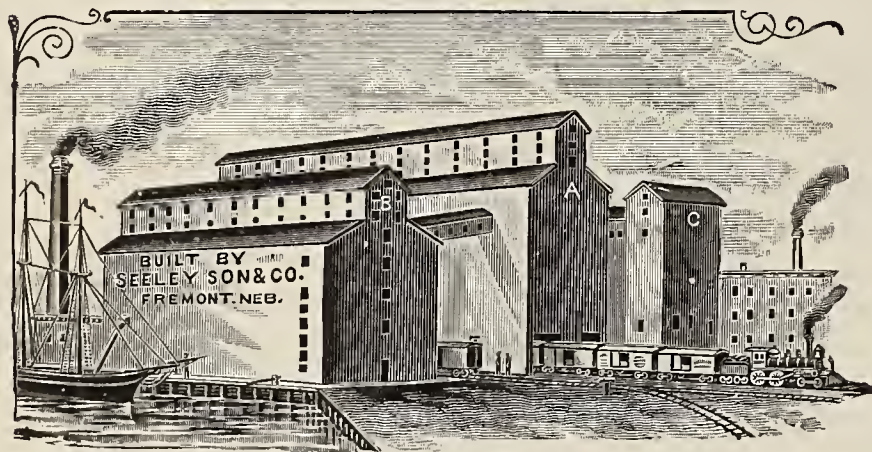
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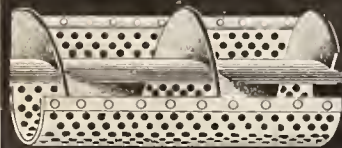
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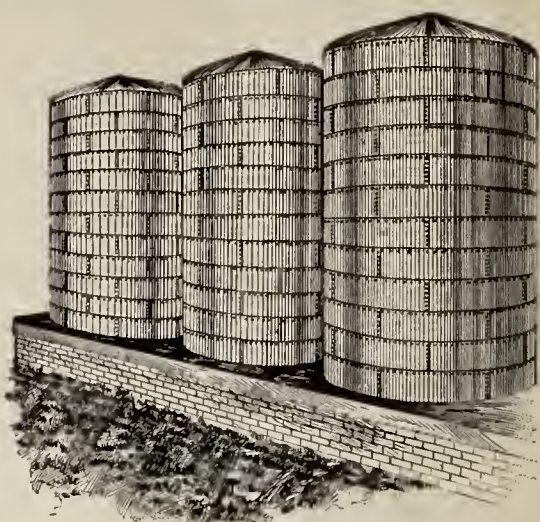
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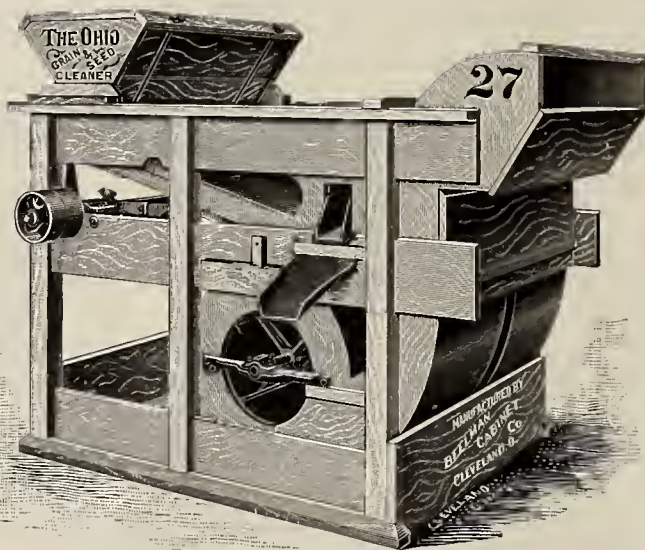
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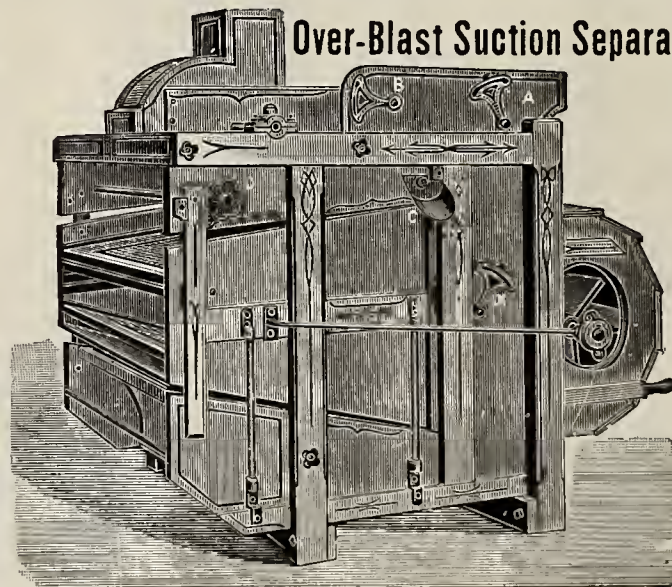
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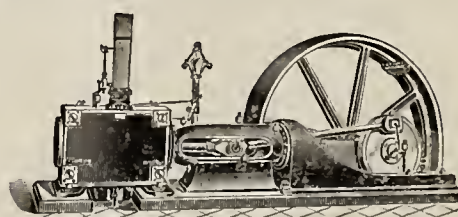


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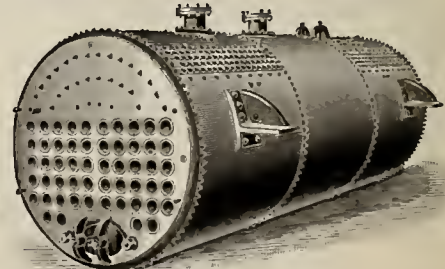
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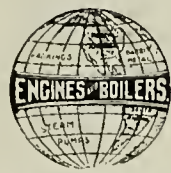
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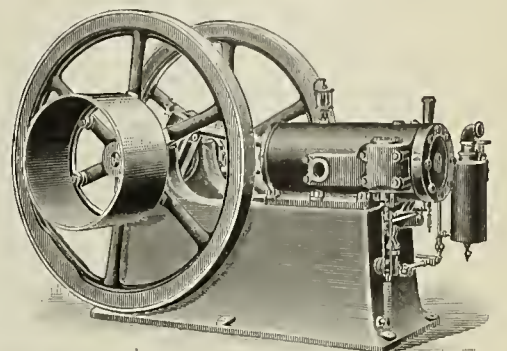
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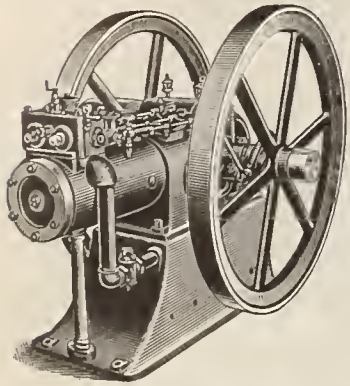
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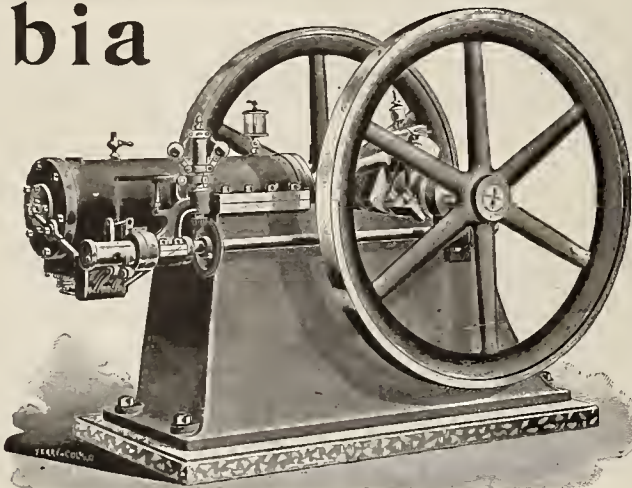
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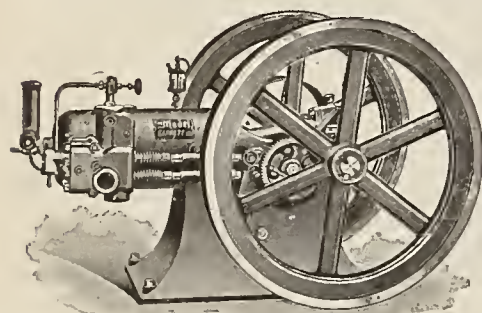
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THE IDEAL AUTOMATIC CAR LOADER.

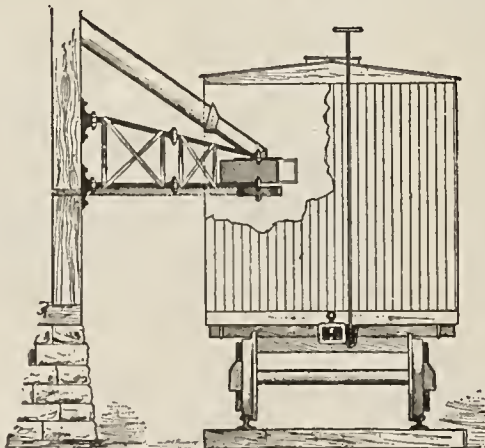
The best and most practical machine
in the market for loading all small
grain. We guarantee it to do its work
satisfactorily.

WHAT IT WILL DO:

Loads both ends of car at same time.
Loads a car in twenty minutes.
Saves you its cost in 60 days. Scours and
brightens the grain.
Cools grain that is beginning to heat.
Loads more grain in car than can be done
by a man with a scoop.
Owing to its peculiar and novel construc-
tion it will not crack the grain.
It is impossible to have a choke-up.
Made of iron and steel, it is durable and
easy to handle.

MADE IN TWO SIZES.

SPECIAL SIZES MADE TO ORDER.



WRITE FOR FULL PARTI-
CULARS, PRICES AND TERMS TO

G. W. DOOLEY & CO., BLOOMINGTON, ILL.

ONE Dixon's Silica Graphite Paint FOUR GRADE. Perfectly Protects Metal Work of Grain Elevators from Corrosion for Years. COLORS.

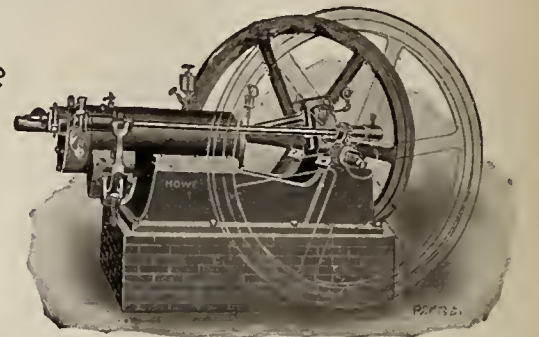
Write us for Information as to its Covering Capacity, Appearance and Durability on Elevator
Buildings of the Kentucky Public Elevator Co., of Louisville, Ky., Pennsylvania R. R.
Co., Jersey City, N. J., and Interior Elevator Co., Minneapolis, Minn.

JOSEPH DIXON CRUCIBLE CO., JERSEY CITY, N. J., U. S. A.

HOWE SCALES AND HOWE ENGINES.

Can you get anything better?
Can you get anything as good?

INVESTIGATION
WILL DETERMINE.



Wagon, Dump, Hopper and Grain Scales.

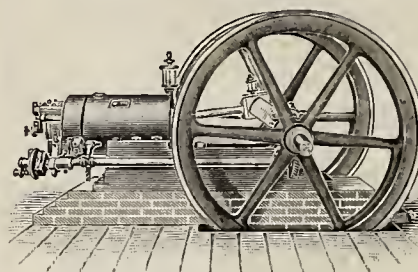
Grain Testers, Grain Scoops, Bag
Holders, Car Starters,
Conveying and Elevating Machinery.

—CATALOGUES.—

S. Louis, Kansas City,
Minneapolis, Cleveland.

BORDEN & SELLECK CO., Chicago, Ill.

THE WITTE GAS AND GASOLINE ENGINES



Are no experiment. Twelve years
of experience in furnishing elevator
power. Modern and reliable. In-
vestigate before buying.

Write for Catalogue H.

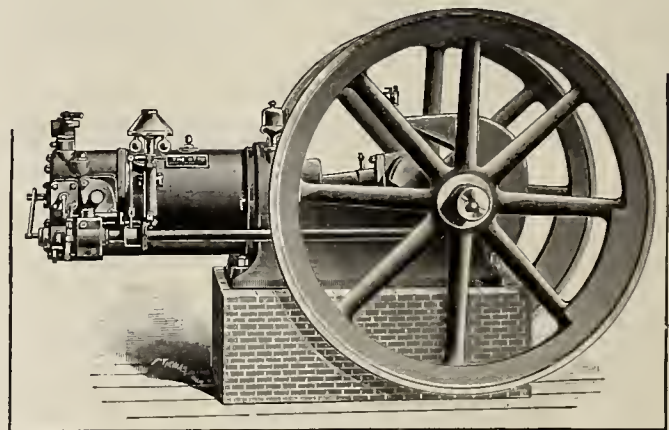
WITTE IRON WORKS CO.,

514 West Fifth St., KANSAS CITY, MO.
CHICAGO OFFICE: 30 1/2 W. Randolph St.

ALREADY GRATIFYING RETURNS ARE COMING IN FROM OUR EXHIBIT AT THE

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Nearly \$30,000 worth of business has reached us from that source.



It seems only necessary for a prospective purchaser to see how easily the
OTTO starts, how smoothly it runs, and how well it is finished, and he becomes a
buyer. If not going to Buffalo, send for a catalogue and write us your wants.

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MINNEAPOLIS,

CHICAGO,

KANSAS CITY,

OMAHA,

313 S. 3rd St. 360 Dearborn St. 1222 Union Ave. 18th and Douglas.

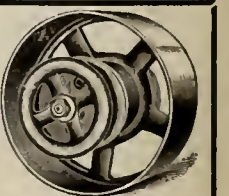
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SPECIALLY DESIGNED FOR GAS, GASOLINE AND OIL ENGINES.

Bolts directly on engine flywheel. A powerful grip, combined with a
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The greatest ease of operation and adjustment.

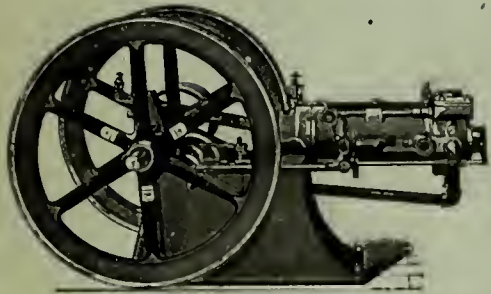
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NONE LIKE THE "PIERCE." THE WAYNE GAS ENGINE

We have now nearly 1 000 engines which are running grain elevators.



Our shops are now equipped to make sizes from 1 to 75 h. p.

We furnish either electrical or hot tube ignitor, or both.

If you are in the market don't fail to get a Pierce engine and have an economical, steady and absolutely reliable and safe power.

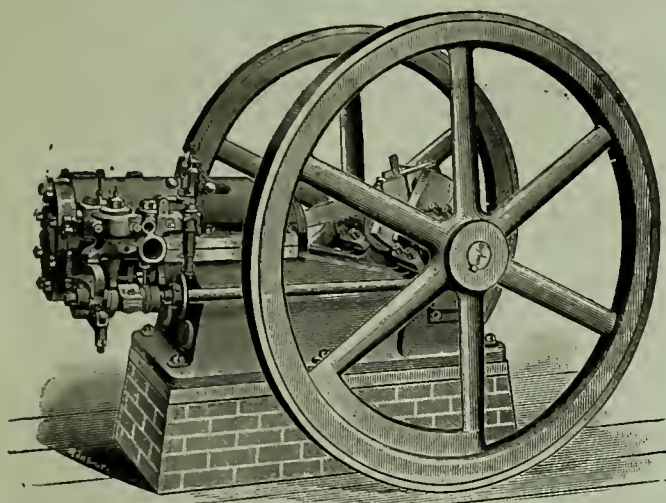
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16th and Racine Sts.,

RACINE, WIS.

"NEW ERA" GASOLINE ENGINE.



Easy to Start.

Easy to Operate.

Vertical Poppet Valves.

Electric or Tube Igniter.

Any working part removed for cleaning or repairing without disturbing other parts.

Heavy and substantial. First class throughout.

Thoroughly Guaranteed.

Sizes 5 to 125 H. P.

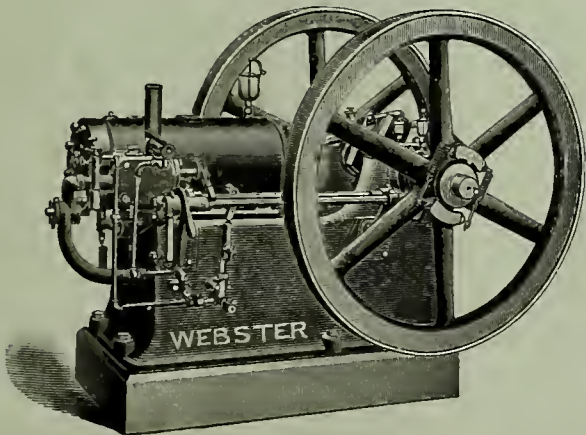
For Catalogue and Prices address

NEW ERA IRON WORKS, 30 DALE AVENUE, DAYTON, OHIO.

WEBSTER HORIZONTAL GAS ENGINE GASOLINE

A reliable engine, readily started, automatically and closely governed.

"Quality first and always."



WEBSTER M'F'G COMPANY,

SOLE MAKERS,

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Eastern Branch, 38 Dey Street, New York City.

Write for handsome new catalogue.

BACKUS Gas and Gasoline 1 to 100 H. P. ENGINES

For driving machinery of every description.

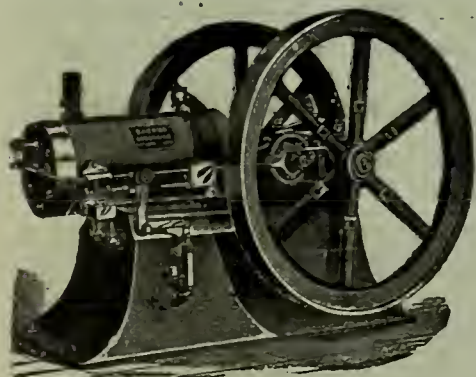
If you want a well-built, high-grade, economical engine, write us for prices. Sold on easy terms.

Second-hand ENGINES of OTHER MAKES AT LOW PRICES.

State machinery to be driven. Catalogues free.

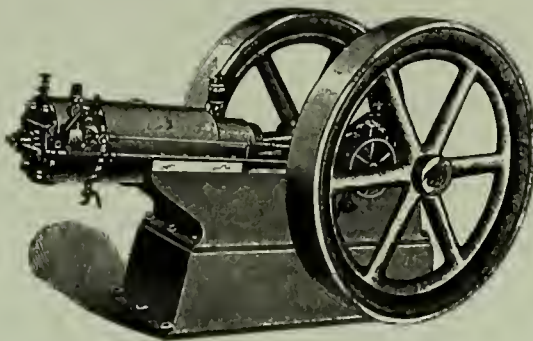
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215 Lake Street, Chicago, Ill.



AN UNEXCELLED ELEVATOR POWER.

Uses either Gas or Gasoline. Electrical or tube ignition.



SIMPLE, ECONOMICAL, RELIABLE.

Don't fail to write us before deciding on anything in the motive power line.

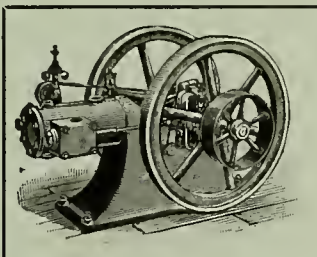
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FORT WAYNE, INDIANA.

THE WATKINS GAS AND GASOLINE ENGINE.

FIRST CLASS AND UP-TO-DATE IN EVERY RESPECT.

USES MAGNETO GENERATOR ATTACHED DIRECT TO ENGINE. DOES AWAY WITH BATTERIES AND HOT TUBES.



We have just moved into our new factory, where we have DOUBLE the floor space had heretofore and are prepared to fill all orders promptly.

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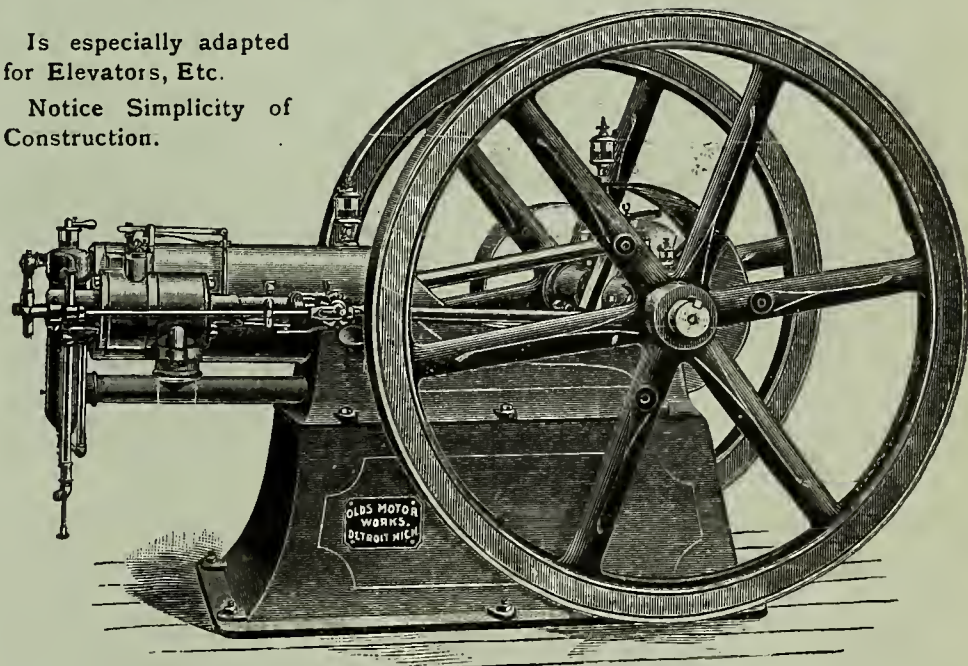
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"OLDS" GASOLINE ENGINE

Is especially adapted for Elevators, Etc.

Notice Simplicity of Construction.



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THE B. S. CONSTANT SHELLER FEEDER

A MONEY SAVER IN EVERY ELEVATOR.



Latest Improved Grain Separators.

Water-tight Boots, Steel Tanks, Dust Collectors, Wagon Dumps, Elevator Boot and Sheller Feeders.

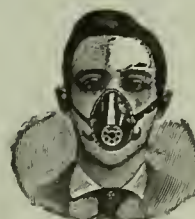
WRITE

B. S. CONSTANT CO.,

BLOOMINGTON, ILL.

Designers of Grain Elevators and Manufacturers of Grain Cleaning and Elevator Machinery.

TRYING to do business without advertising is like winking at a girl in the dark—you know what you are doing but nobody else does



Dust Protector.

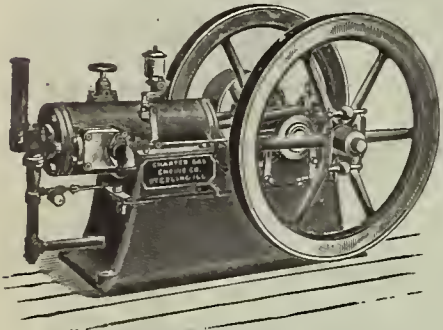
The "Perfection" with Automatic Valve compels perfect protection and ventilation. Improved and Enlarged. Thousands in use. Nickel plated protector postpaid, \$1.50. Cfr. Free. Agents wanted.

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CHARTER Gas and Gasoline Engine.

ALWAYS READY FOR USE.



Expense according to work done.
When stopped expense ceases.
No attention after starting.

Positively safe.
Wonderfully economical.
Absolutely reliable.

For Grain Elevators, Pumping, Feed and Flouring Mills, Well Drills, Thrashing Machines, Hay Presses, Saws, Printing Machinery, Bakers', Wood and Iron Working Machinery, Miners, Etc., Etc.

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Catalogue and Testimonials on Application.

STATE YOUR POWER NEEDS.

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What's the Trouble?

Dusty elevator? Liable to fire and dust explosions?
High insurance rates? Operating expenses too large?

DAY'S DUST-COLLECTING SYSTEM

Is the remedy for these evils. It soon pays for itself.
Then, why not have it? Write to-day about this system

Postal for the new booklet, "Dust Collecting and Fuel Feeding."

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1122-1126 Yale Place, Minneapolis, Minn.

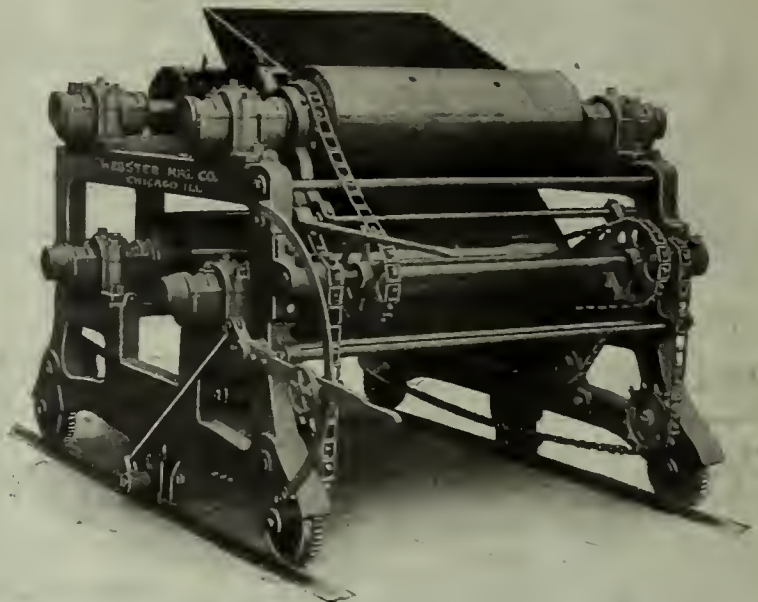


That's Day's Dust Collector. There's no other like it.

WEBSTER M'F'G. CO.

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INCORPORATED 1882.



Engineers, Founders and Machinists.

MANUFACTURERS OF UP-TO-DATE

Grain Elevator

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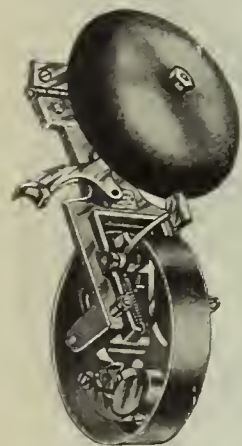
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THEY PREVENT CHOKES IN ELEVATOR
LEGS AND FIRES IN ELEVATOR HEADS.

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